LED 电视

底板: N98B/N98A

型号: UA22C4000P
UA26C4000P
UA32C4000P

维 修 手 册

LED 电视

UA22C4000P/UA26C4000P/UA32C4000P

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参阅 GSPN 维修手册（翻阅封底）获取更多信息。

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GSPN (全球维修合作网络)

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北美	service.samsungportal.com
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3.拆卸和重新组装

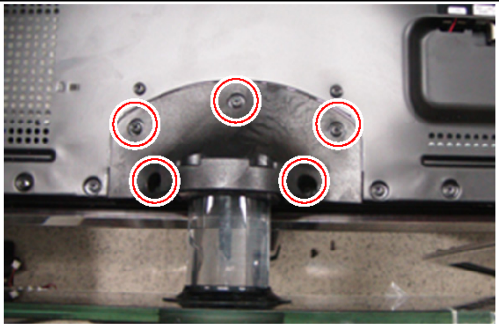
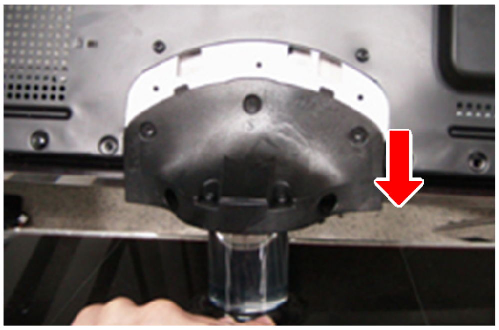
维修手册的这一章叙述UA26C4000P LED电视的拆卸和重新组装步骤。

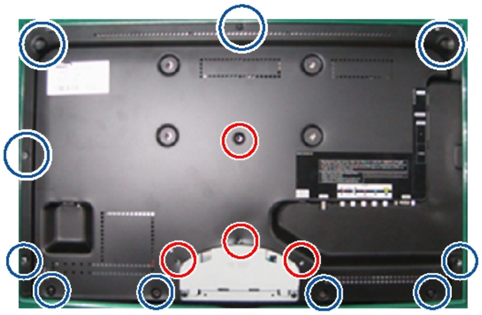
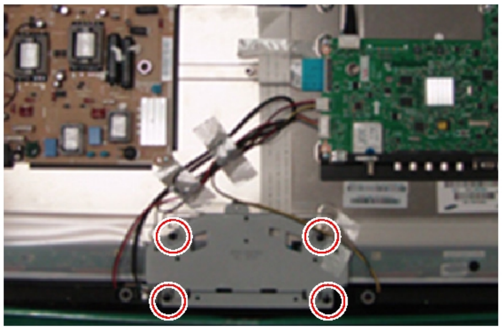
⚠**警告：**本 LED 电视包含静电敏感器件。处理这些部件时应小心。

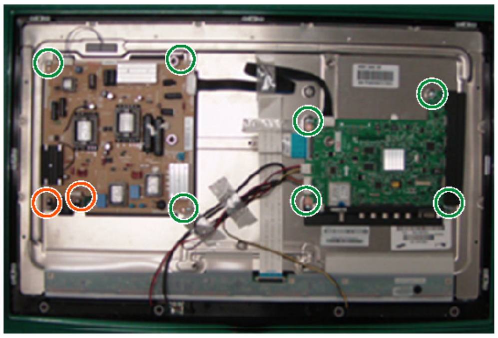
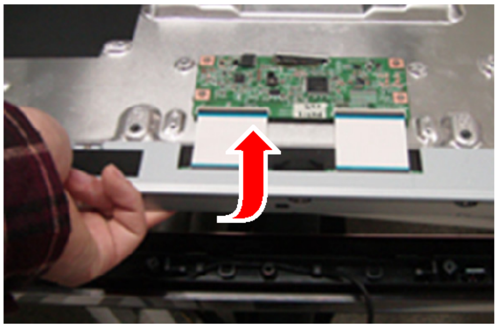
3-1.拆卸和重新组装

⚠**小心：**1.拆卸前，断开 LED 电视的电源。

2.小心遵守以下步骤，不得使用任何金属器具拆卸本产品。

说明	图片说明	螺钉
1. 将显示器面朝下放在垫有软垫的桌子上。 拆卸底座上的 5 个螺钉（22 英寸的 3 个螺钉）。 拆除底座。 对于 22 英寸的显示器，可以在不拆卸底座的情况下将后盖卸下。		
		 6003-000133
		

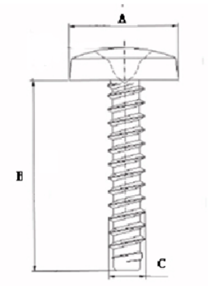
说明	图片说明	螺钉
2.26" C4000： 拆卸后盖上的13个螺钉。 22" C4000： 拆卸后盖上的 10 个螺钉。		 6003-000133 6003-001003
3.提起后盖。.		
4.拆卸左右两个扬声器。		
5.提起底座的链接。 拆卸架座上的 4 个螺钉。		 6003-000133

说明	图片说明	螺钉
6.拆卸主板上的4个螺钉及IP板上的5个螺钉。.		6001-002283 6001-000115
7.提起屏板。		

※ 重新组装步骤与拆卸步骤相反。

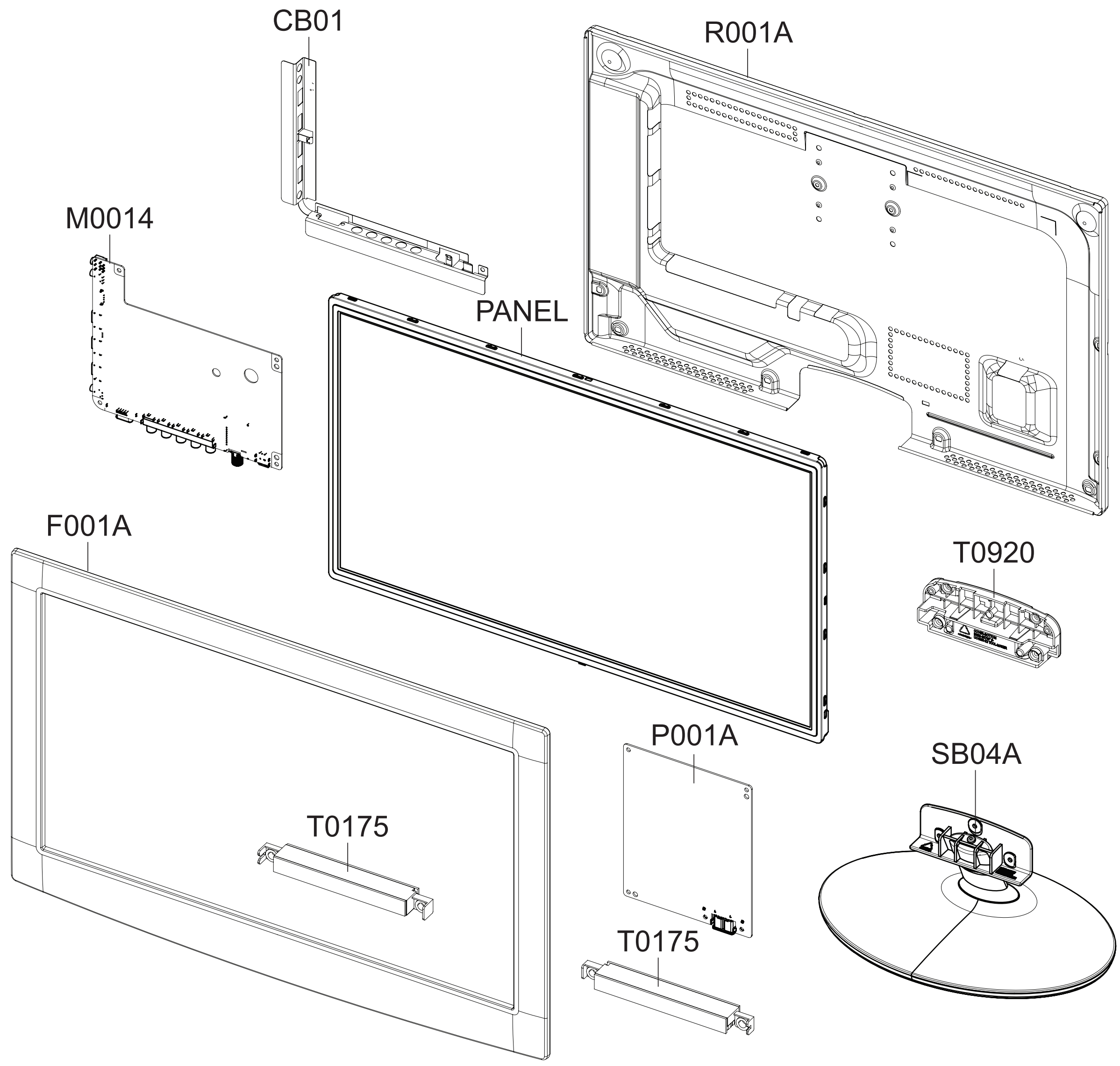
螺钉尺寸

代码编号	A (mm)	B (mm)	C (mm)	Q'ty
6003-001003	8.3~8.4	12~12.4	4~4.15	
6003-000133	8.3~8.4	7.9~8.3	3.70~3.83	
6001-002283	6.3~6.5	5.0~5.6	2.87~8.98	
6001-000115	5.8~6.3	9.4~10.0	2.87~2.98	



5. Exploded View & Part List

5-1. UA22C4000P Exploded View



5-1-1. UA22C4000P Parts List

Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
CB01	BN61-06207B	BRACKET-AV;UC 4000,PCM,0.5,BKN-P824,SO 2	1	SNA	
F001A	BN96-13150F	ASSY COVER P-FRONT;UC4000 22,CO(DTV),PMM	1	SA	
M0014	BN94-03322Z	ASSY PCB MAIN;UA22C4000PXXZ	1	SA	
SB04A	BN96-11163J	ASSY STAND P-BASE;UC4000 19/22,ABS+PMMA,	1	SA	
P001A	BN44-00347C	DC VSS-LED TV PD BD;PD22AF0D_ZSM,PSLF650	1	SA	
PANEL	BN07-00865A	LCD-PANEL;T216HAE1-DB,CLL2AC1,6bit Hi-FR	1	SA	
R001A	BN96-13153H	ASSY COVER P-REAR;UC4000 22,CO,PCM,BKN-P	1	SA	
T0175	BN96-12945A	ASSY SPEAKER P;16ohm,4pin,3W,L : 360 R:	1	SA	
T0920	BN61-06289A	GUIDE-STAND;UC4000 22,PC+G/F 20%,V2,BK00	1	SNA	

5-2. UA22C4000P Parts List

Service Bom (**SA**: SERVICE AVAILABLE, **SNA**: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
			UA22C4000PXXZ			
0.1		BN90-02596F	ASSY COVER FRONT;UC4000 22	1	SNA	
..2	F001A	BN96-13150F	ASSY COVER P-FRONT;UC4000 22,CO(DTV),PMM	1	SA	
...3	F001	BN63-06560F	COVER-FRONT;UC4000 22,CO(DTV),PMMA+PMMA/	1	SNA	
...3	CCM1	BN63-02183U	COVER-SHEET;AMBER,PE,T0.08,395,200,CLEAR	1	SNA	
...3	CCM1	BN63-04755F	COVER-SHEET;PE,T0.05,W410mm,200M,600FE,C	1	SNA	
...3		BN60-00162L	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	1.5	SNA	
...3		BN61-06213A	BRACKET-STOPPER BOSS;C8K,S50C+SECC T1.2	6	SNA	
...3		BN61-06215A	BRACKET-STOPPER PANEL;C8K,SK5,0.5T	1	SNA	
...3	M0125	BN96-12884B	ASSY BOARD P-TOUCH FUNCTION&IR;UE22C4000	1	SA	
...3	T0175	BN96-12945A	ASSY SPEAKER P;16ohm,4pin,3W,L : 360 R:	1	SA	
...3	T0382	BP61-00495C	HOLDER-CARE;PJT,ACRYL-FOAM,T0.25,W30.0mm	0.16	SNA	
0.1	R001A	BN90-02599H	ASSY COVER REAR;UC4000 22	1	SNA	
..2	R001A	BN96-13153H	ASSY COVER P-REAR;UC4000 22,CO,PCM,BKN-P	1	SA	
...3	T0101	BN61-06288A	BRACKET-WALL;UC4k 19/22,SECC,T1.0	2	SNA	
...3	R001	BN63-06563C	COVER-REAR;UC4000 22,SO/ZD/ZL,PCM,BKN-P8	1	SNA	
...3		BN96-13400A	ASSY MISC P-INSULATOR;UC4000 22,PC,T0.43	1	SNA	
....4	T0278	BN60-00122B	SPACER-SPONGE;UB7000,CR,L140,T2.0,W10	2	SNA	
....4		BN63-06772A	SHEET-INSULATOR;UC4K-22,PC,T0.4,150*187	1	SNA	
...3		BN68-02530W	LABEL-TERMINAL BOTTOM;UC4000 22/26,CO,PE	1	SNA	
...3		BN68-02531X	LABEL-TERMINAL SIDE;UC4000 22,CO,PET,T0.	1	SNA	
...3	SCREW	6003-001206	SCREW-TAPTYPE;BH,+,B,M3,L4,BLK,SWRCH18A	2	SA	
...3		BN60-00162Y	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.35T	0.85	SNA	
..2	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	13	SA	
0.1		BN91-05170A	ASSY LCD-CMO;BN07-00865A	1	SNA	
..2	PANEL	BN07-00865A	LCD-PANEL;T216HAE1-DB,CLL2AC1,6bit Hi-FR	1	SA	
0.1		BN92-05733F	ASSY BOX;UC4000 22	1	SNA	
..2	T0077	BH68-00329D	LABEL BAR CODE-02;NO CE,NO WT`Y,MPRII,LA	1	SNA	
..2		BN69-04710F	BOX-01,SET;22UC4000,CB,A-01,SW2,W609,D42	1	SNA	
..2	M0245	BN96-02895A	ASSY MISC P-01,HANDLE PACKING;ALL MODEL,	1	SNA	
...3		BN66-00007A	LEVER-TOP;ALL MODEL,LDPE,WHITE,5.8g	1	SNA	
...3		BN66-00008A	LEVER-BOTTOM;ALL MODEL,LDPE,WHITE,4.01g	1	SNA	
0.1		BN92-05736A	ASSY P/MATERIAL;UC4000 22	1	SNA	
..2		6902-000061	BAG AIR;LDPE,T0.2,W500,L1000,TRP,370.000	1	SNA	
..2		6902-000379	BAG AIR;LDPE,T0.2,W1000,L1800,TRP,1260.0	1	SNA	
..2		6902-000604	BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP,	1.07	SNA	
..2		6902-000609	BAG ROLL;LDPE,T0.05,W2400,L1000,TRP,30.0	0.02	SNA	
..2		AA69-03119Q	PAD-PLATE;CB SW-2,1240,845	1	SNA	
..2		BH69-00457D	PACKING-PAD;CY15PO,OTHER,T3.0	1	SNA	
..2	T0246	BN69-04489A	CUSHION-SET;UC 4000 22inch,EPS	1	SNA	
..2	T0524	6902-001067	BAG PE;HDPE/NITRON,T0.015/T0.5,W700,L600	1	SNA	
..2		BN69-00391P	PAD-ANGLE;OTHER,T4,50,2200,YEL	1	SNA	
..2		BN69-02240E	PALLET-WOOD;P2350,WOOD,W1255,D850,H120,4	1	SNA	
..2		BN74-00008D	TAPE-OPP MASKING;OPP,T0.05,W75,L800M,CLR	1.53	SNA	
0.1		BN92-05757H	ASSY LABEL;UA22C4000PXXZ	1	SNA	
..2		BN68-02700A	LABEL-LED-POP;Highlight Sticker Color,PE	1	SNA	
..2	T0527	BP68-00052B	LABEL-00,RATING;CCTV,TETRON PAPER,T0.05,	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.1	ACCE1	BN92-05935J	ASSY ACCESSORY;UA22C4000PXXZ	1	SNA	
..2	ACCE2	BN96-13179F	ASSY ACCESSORY-CABLE;UA22C4000PXXZ	1	SNA	
...3	EC11	3903-000540	CBF-POWER CORD;DT,CHINA,LSG-21L,250V,2.5	1	SA	
...3	T0524	6902-001107	BAG PE;LDPE,T0.05,W450,L400,TRP,0,3Separ	1	SNA	
...3	M0114	BN39-01154C	CBF SIGNAL;Chelsea Slim, STEREO Plug to	1	SA	
...3	M0114	BN39-01154G	CBF SIGNAL;UN40B7000WMXZD,1P/1P*2,30AWG,	1	SA	
...3	M0114	BN39-01154H	CBF SIGNAL;UE40B7000WWXXC,RCA 3PIN,30AWG	1	SA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN43-00004A	BATTERY;BM1L,BATTERY,MN,600mAh,7.9g	2	SNA	
...3	REMO2	BN59-01016A	REMOCON;TM1050,SAMSUNG,20PIN SINGLE,48KE	1	SA	
...3		BN61-05596A	HOLDER-WIRE CABLE;LED TV,LDPE,T0.8,L150,	1	SNA	
...3	M9889	BN63-01798B	CLOTH-CLEAN;cloth,180,200,sea blue,ToC	1	SNA	
..2	ACCE4	BN96-15763S	ASSY ACCESSORY-MANUAL;UA22C4000PXXZ,SX1	1	SNA	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,9.2	1	SNA	
...3	T0527	AA68-00764A	LABEL-PASSING;SAMSUNG ALL,ART PAPER,CLR,	1	SNA	
...3	T0527	AA68-02517A	LABEL;PJTV(TTSEC),COPPERPLATE,50,75,YELL	1	SNA	
...3	T0059	AA68-03184A	MANUAL FLYER-CARD-08;ALL MODEL,CHINESE,2	1	SNA	
...3		AA68-03184C	MANUAL FLYER-SERVICE CARD;comm,Samsung,S	1	SNA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN68-02767G	MANUAL USERS-IB;Comm,Samsung,SC,China,W/	1	SNA	
...3		BN68-03019B	MANUAL FLYER-TOC GUIDE;ALL,SAMSUNG,36LEN	1	SNA	
0.1	M0017	BN91-05474Z	ASSY CHASSIS;UA22C4000PXXZ	1	SNA	
..2	M0014	BN94-03322Z	ASSY PCB MAIN;UA22C4000PXXZ	1	SA	
...3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	0.125	SNA	
...3		3701-001698	CONNECTOR-DSUB;15P,3ROW,FEMALE,ANGLE,NI	1	SA	
...3		3711-007302	HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG	1	SA	
...3	T0562	6046-001015	STAND OFF;#4-40,L5,Ni PLT,C3601,M3	2	SNA	
...3	ET01	BN40-00172A	TUNER;DTOS40CVH081A,DVB-T/C,164CH,38.9MH	1	SA	
...3	CB01	BN61-06207B	BRACKET-AV;UC 4000,PCM,0.5,BKN-P824,SO 2	1	SNA	
...3	T0066	BN62-00040A	HEAT SINK-ES;SAPPHIRE,T2.0,36*36*6.6,BLK	1	SNA	
...3	T0066	BP62-00047A	HEAT SINK-ES;DLP,A6063S,T2.5,13,13,TAPE	2	SNA	
...3		BN97-04310U	ASSY SMD;UA22C4000PX	1	SNA	
....4		0202-001767	SOLDER-CREAM;LST-5710,D20~38,42Sn/57Bi/1	5.23	SNA	
....4	DS01A	0401-000116	DIODE-SWITCHING;MMSD914T1,100V,200mA,SOD	1	SA	
....4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	11	SA	
....4	D0254	0402-000553	DIODE-SCHOTTKY;SS24/B240,40V,2000mA,DO-2	2	SA	
....4		0403-001164	DIODE-ZENER;MMSZ5232B,5.32-5.88V,500MW,S	1	SA	
....4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	8	SNA	
....4	D0254	0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	1	SA	
....4	T0139	0406-001200	DIODE-TVS;RCLAMP0504F,6/-/-V,150W,SC-70	1	SA	
....4	T0139	0406-001271	DIODE-TVS;RCLAMP0524P,6/-/-V,150W,SLP251	2	SNA	
....4	SD3	0407-000114	DIODE-SWITCHING;KDS184,80V,100mA,SOT-23,	3	SNA	
....4	Q101	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	10	SA	
....4	CEQ2	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	5	SA	
....4	Q409	0505-002560	FET-SILICON;AO6415,P,-20V,-3.3A,0.15ohm,	1	SA	
....4	T0596	0904-002554	IC-USC;AU6256-JBF,QFN,28P,5x5mm,12MHz,TP	1	SA	
....4	IC106	1001-001573	IC-VIDEO SWITCH;SiI9287BCNUTR,QFN,72P,10	1	SNA	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm	2	SA	
....4	T0085	1201-002487	IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL	1	SA	
....4	T0124	1201-002993	IC-POWER AMP;TAS5715,HTQFP,48P,7x7mm,DUA	1	SA	
....4	T0087	1203-001815	IC-POSI.FIXED REG.;78M09,TO-252,3P,PLAST	1	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	T0087	1203-002835	IC-POSI.FIXED REG.;KIA7805AF,DPAK,3P,6.6	1	SA	
....4	T0087	1203-002898	IC-POSI.FIXED REG.;G950T45R,T0-252,3P,6.	1	SA	
....4		1203-004364	IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P,	1	SA	
....4		1203-005538	IC-DC/DC CONVERTER;AOZ1021HAIL,SOP,8P,4.	1	SA	
....4		1203-006013	IC-DC/DC CONVERTER;AOZ1031AI,SO-8,8P,4.9	1	SA	
....4		1203-006017	IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9	1	SA	
....4	T0087	1203-006135	IC-POSI.FIXED REG.;AP1117D-33-GZ-13-89,T	1	SA	
....4	T0087	1203-006136	IC-POSI.FIXED REG.;AP1117D-18-GZ-13-89,T	1	SA	
....4	IC012	1203-006138	IC-POSI.ADJUST REG.;AP1117DGZ-13-89,TO-2	1	SA	
....4		1203-006288	IC-VOL. DETECTOR;RT9818B-18GV,SOT-23-3,3	1	SA	
....4		1204-003088	IC-DEMODULATOR;DRX39XYK,PQFN,64P,9x9x0.8	1	SA	
....4		1204-003096	IC-VIDEO DECODER;HIDTVPRO-SX,PBGA,580P,P	1	SA	
....4		1205-003201	IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm	2	SA	
....4		1205-003733	IC-SWITCH;AP2191MPG-13,MSOP-8L-EP,8P,2.9	1	SA	
....4		1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	SA	
....4		1405-001271	VARISTOR;20Vdc,5A,1.0x0.5x0.6mm,TP	20	SA	
....4	ZR24	2007-000109	R-CHIP;1Mohm,5%,1/10W,TP,1608	1	SA	
....4	R105	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	20	SA	
....4	AR49	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	5	SNA	
....4	MR306	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	12	SNA	
....4	R319	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	50	SNA	
....4		2007-000146	R-CHIP;6.8Kohm,5%,1/16W,TP,1005	2	SNA	
....4	R104	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	33	SA	
....4	R102	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	6	SA	
....4	MR36	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	4	SNA	
....4	AR43	2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	2	SNA	
....4	MR13	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	3	SNA	
....4		2007-000161	R-CHIP;82Kohm,5%,1/16W,TP,1005	2	SNA	
....4	DR39	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	2	SNA	
....4	MR16	2007-000168	R-CHIP;470Kohm,5%,1/16W,TP,1005	1	SA	
....4	R111	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	16	SNA	
....4	HDR17	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	9	SNA	
....4	R338	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	11	SNA	
....4	UR23	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	3	SNA	
....4	MR9	2007-000455	R-CHIP;18Kohm,1%,1/10W,TP,1608	1	SA	
....4	R124	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	3	SNA	
....4	HR3	2007-000903	R-CHIP;430ohm,1%,1/10W,TP,1608	1	SNA	
....4	DR37	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	2	SNA	
....4	AAR20	2007-001002	R-CHIP;510ohm,5%,1/10W,TP,1608	2	SNA	
....4		2007-001285	R-CHIP;5.6ohm,5%,1/16W,TP,1005	2	SA	
....4	OTR1	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	8	SNA	
....4		2007-001317	R-CHIP;910ohm,5%,1/16W,TP,1005	1	SNA	
....4	R326	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	8	SNA	
....4		2007-002768	R-CHIP;6.2Kohm,1%,1/10W,TP,1608	1	SA	
....4	MR316	2007-002796	R-CHIP;510ohm,5%,1/16W,TP,1005	1	SA	
....4		2007-002906	R-CHIP;200Kohm,1%,1/10W,TP,1608	1	SA	
....4	TR30	2007-007009	R-CHIP;75ohm,5%,1/16W,TP,1005	3	SNA	
....4		2007-007134	R-CHIP;39Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007135	R-CHIP;18Kohm,1%,1/16W,TP,1005	1	SNA	
....4	DR4	2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	4	SNA	
....4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	5	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-007317	R-CHIP;2.2Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	11	SNA	
....4	MR11	2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	9	SNA	
....4		2007-008134	R-CHIP;12.4Kohm,1%,1/16W,TP,1005	1	SC	
....4		2007-008275	R-CHIP;30Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-008593	R-CHIP;750ohm,1%,1/16W,TP,1005	1	SA	
....4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	3	SA	
....4		2011-001527	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,4P,TP,	3	SNA	
....4		2011-001589	R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1	11	SNA	
....4	AC1	2203-000125	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1608,-	4	SA	
....4	DC30	2203-000138	C-CER,CHIP;1.5nF,10%,50V,X7R,TP,1005,-	2	SA	
....4	PC43	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	3	SA	
....4	MC302	2203-000425	C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005	4	SA	
....4	C254	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	10	SA	
....4	C507	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005	1	SA	
....4	V1233	2203-000575	C-CER,CHIP;220nF,10%,25V,X7R,TP,2012	6	SNA	
....4	ZC14	2203-000626	C-CER,CHIP;0.022nF,5%,50V,C0G,1608	2	SNA	
....4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,1005	1	SNA	
....4	DC25	2203-000812	C-CER,CHIP;.033nF,5%,50V,C0G,TP,1005	9	SA	
....4	KFC6	2203-000872	C-CER,CHIP;0.0030nF,0.25pF,50V,C0G,1608	2	SNA	
....4	DC87	2203-001153	C-CER,CHIP;.068nF,5%,50V,NP0,1005	2	SA	
....4	AD480	2203-001428	C-CER,CHIP;470nF,10%,50V,X7R,TP,2012	2	SNA	
....4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	20	SNA	
....4	AD480	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	6	SNA	
....4	C711	2203-002982	C-CER,CHIP;6.8nF,10%,50V,X7R,1005	1	SA	
....4	AAC1	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	14	SNA	
....4	AD480	2203-005511	C-CER,CHIP;27nF,10%,10V,X7R,TP,1005	1	SA	
....4	AD480	2203-005968	C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005	2	SNA	
....4	AD480	2203-006104	C-CER,CHIP;1000nF,10%,50V,X7R,3225	1	SA	
....4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,TP,1005	5	SNA	
....4	PC11	2203-006141	C-CER,CHIP;1000nF,10%,16V,X5R,1608	4	SNA	
....4	C102	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,TP,1005	112	SNA	
....4	JC10	2203-006324	C-CER,CHIP;2200nF,10%,10V,X5R,1608	2	SA	
....4	AD480	2203-006336	C-CER,CHIP;10000nF,10%,25V,X5R,3216	17	SA	
....4	C125	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	41	SC	
....4	HE4	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,2012	3	SA	
....4	HDC11	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	18	SNA	
....4	AD480	2203-007270	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608	1	SNA	
....4	T0052	2703-000158	INDUCTOR-SMD;1uH,10%,2012	3	SA	
....4	T0052	2703-000296	INDUCTOR-SMD;680nH,10%,1608	1	SA	
....4	VL6	2703-000398	INDUCTOR-SMD;10uH,10%,3225	6	SA	
....4	T0052	2703-001239	INDUCTOR-SMD;3.3uH,10%,1608	3	SA	
....4	T0052	2703-002268	INDUCTOR-SMD;8.2nH,5%,1005	2	SNA	
....4	T0052	2703-003149	INDUCTOR-SMD;2.2uH,20%,5050	2	SA	
....4	T0052	2703-003150	INDUCTOR-SMD;4.7uH,20%,5050	4	SNA	
....4	X202	2801-003326	CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh	1	SA	
....4	X202	2801-004004	CRYSTAL-SMD;20.25MHz,20ppm,28-AAN,13pF,2	1	SA	
....4	X202	2801-004775	CRYSTAL-SMD;12MHz,30ppm,16pF,30ohm,TP	1	SNA	
....4	F103	2901-001506	FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP	2	SA	
....4	T0568	3301-002039	BEAD-SMD;26ohm,1608,TP	47	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	T0313	3404-001207	SWITCH-TACT;12V,50mA,160gf,6.2X6.2,SPST	1	SA	
....4		3701-001293	CONNECTOR-HDMI;19P,2R,FEMALE,SMD-A,AU	1	SA	
....4	CN906	3707-001095	CONNECTOR-OPTICAL;SMD-A(Ultra Slim),SPDI	1	SA	
....4	AC510	3708-001150	CONNECTOR-FPC/FFC/PIC;30P,1mm,SMD-A,SN,Y	1	SA	
....4	HB01A	3711-005601	HEADER-BOARD TO CABLE;BOX,8P,1R,2mm,SMD-	1	SNA	
....4	HB01A	3711-007336	HEADER-BOARD TO CABLE;B0X,4P,1R,2.5mm,SM	1	SA	
....4		3722-003044	JACK-USB;4P/1C,NI,BLK,SMD-A,A-TYPE	1	SA	
....4		BN97-04189A	ASSY MICOM;T-TDT5DAAC-1011.1,2010.07.29	1	SNA	
.....5		1107-001940	IC-NAND FLASH;KFG1G16U2D-HIB6,1Gbit,64Mx	1	SNA	
....4		BN97-04269A	ASSY MICOM-SUB;T-TDT5DEUS-0127,UC5R,2010	1	SNA	
.....5		1107-001938	IC-FLASH MEMORY;W25X40BVSSIG,4Mbit,SOP,8	1	SNA	
....4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,1608	1	SNA	
....4	AD480	2203-006841	C-CER,CHIP;1000nF,10%,16V,X5R,TP,1005	2	SNA	
....4		BN41-01332B	PCB MAIN;UA22C4000,FR-4,4,1.2T,192*158,2	1	SNA	
....4		1203-006337	IC-POSI.FIXED REG.;G9091-330T11U,SOT-23-	1	SA	
....4		1203-006142	IC-DC/DC CONVERTER;BD8924G,5P,2.9x1.6x1.	1	SA	
....4	J914	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	1	SC	
....4	KAR21	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
....4		2703-003890	INDUCTOR-SMD;47uH,10%,3225	1	SA	
....4		1103-001487	IC-EEPROM;AT24C256C-SSHL-T,256Kbit,32Kx8	1	SA	
....4		1105-002153	IC-DDR2 SDRAM;K4T1G164QF-BCF8,DDR2,1Gbit	2	SNA	
...3	HDP01	BN61-06644A	HOLDER-PCB;LC750,NYNOL66,V0	1	SNA	
...3		3722-003156	JACK-PHONE;1/7P,NI,LAUREL-GREEN,ANGLE	1	SA	
...3		3722-003158	JACK-PHONE;1/7P,NI,BLK,ANGLE	3	SA	
...3		3722-003159	JACK-PHONE;1/7P,NI,YEL,ANGLE	1	SA	
0.1		BN91-05774C	ASSY SHIELD;UA22C4000PXHC	1	SNA	
..2	CIS1	0203-001586	TAPE-FILAMENT;#893,0.15,30,55	0.1	SNA	
..2	T0081	6001-002283	SCREW-MACHINE;BH,+,M3,L5,ZPC(WHT),SWRCH1	7	SNA	
..2	T0081	6001-002610	SCREW-MACHINE;BH,+,M4,L6,ZPC(BLK),SWRCH1	2	SA	
..2	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	5	SA	
..2	P001A	BN44-00347C	DC VSS-LED TV PD BD;PD22AF0D_ZSM,PSLF650	1	SA	
..2	M0131	BN63-00209A	GASKET;RS24NS,CONDUCTIVE FAB,4mm,10mm,30	1	SNA	
..2	T0531	BN63-06700B	COVER-BOTTOM;UC4000 22,HIPS,HB,BK0020	1	SA	
..2	M0230	BN96-12447N	ASSY CABLE P-FFC;UN22C4000PFXZA,FFC,0.3m	1	SA	
..2	M0525	BN96-13413A	ASSY COVER P-GUIDE STAND;UC4000 19/22,PC	1	SA	
...3	M0081	6003-001001	SCREW-TAPTYPE;FH,+,B,M3,L8,ZPC(BLK),SWRC	1	SNA	
...3	T0060	BN61-05091A	SPRING ETC-STAND;ECOFIT 23",SK5,T0.3	1	SNA	
...3	T0920	BN61-06289A	GUIDE-STAND;UC4000 22,PC+G/F 20%,V2,BK00	1	SNA	
..2		BN98-02754A	ASSY K/D-SILICON/RUBBER;C4000,C5000,XZ	1	SNA	
...3	M2893	BN39-01267L	LEAD CONNECTOR;UC4Q,Flat Connector Ass'y	1	SA	
...3		BN73-00272A	SILICON/RUBBER-GAPPAD;UE46B7700,SILICON+	1	SNA	
...3	M0131	BN63-01252A	GASKET;NB24BS,CONDUCTIVE FABRIC,0.7mm,12	1	SNA	
...3		BN68-03035A	LABEL-PCB;10MM,30MM,WHITE,label pcb	1	SNA	
..2		6001-002647	SCREW-MACHINE;BH,+,M3,L10,ZPC(WHT),SWRCH	2	SNA	
0.1	S001A	BN90-02602F	ASSY STAND;UC4000 22	1	SNA	
..2	MASB1	BN96-10168C	ASSY STAND P-BODY;UC4000 22,PC	1	SA	
...3	T0524	6902-000023	BAG PE;LDPE,T0.08,W150,L120,TRP,1.650g	1	SNA	
...3	T0069	BN60-00119B	SPACER-FELT;ECOFIT 23"(P2370),FELT,L145,	1	SNA	
...3		BN61-05342B	STAND-BAR;UC4000 19,22,PC,ROSE BLK	1	SNA	
....4		BN61-05410B	STAND-BAR A;LB650 19",22",PC,TRD03(ROSE	1	SNA	
.....5		BN61-02932E	BRACKET-STOPPER NUT;ECOFIT 20,M4,D8,L12,	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		BN61-05413A	STAND-BAR B;LB650 19,22,PC,CLEAR	1	SNA	
...3		BN68-01529P	LABEL-STICKER;B650,W/W,ART PAPER,T0.05,5	1	SNA	
..2	SB04A	BN96-11163J	ASSY STAND P-BASE;UC4000 19/22,ABS+PMMA,	1	SA	
...3	M0081	6003-001001	SCREW-TAPTYPE;FH,+,B,M3,L8,ZPC(BLK),SWRC	4	SNA	
...3	T0524	6902-000109	BAG PE;HDPE,T0.015,W350,L430,TRP,28,2,4.	1	SNA	
...3	CIS4	BN61-01717A	HOLDER-STAND;BIZET,NI PLT,CH,+,M4,L11(5)	1	SNA	
...3		BN61-05087A	BRACKET-STAND BOTTOM;ECOFIT 23",SECC T0.	1	SNA	
...3	CCM1	BN63-02183K	COVER-SHEET;Rhcm,PE Vinyl,T 0.04,250MM,2	0.3	SNA	
...3		BN63-05425E	COVER-STAND BASE;UC4000 19/22,ABS+PMMA,H	1	SNA	
...3		BN68-01529P	LABEL-STICKER;B650,W/W,ART PAPER,T0.05,5	1	SNA	
...3		BN68-02772B	MANUAL FLYER-STAND GUIDE;C4000,Samsung,W	1	SNA	
...3	AR011	BN73-00077A	RUBBER FOOT;MATISSE,BUMPON,#13.5,T2.0,GR	4	SNA	

1. Precautions

1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1-1. Warnings

1. For continued safety, do not attempt to modify the circuit board.
2. Disconnect the AC power and DC power jack before servicing.

1-1-2. Servicing the LED TV

1. When servicing the LED TV, Disconnect the AC line cord from the AC outlet.
2. It is essential that service technicians have an accurate voltage meter available at all times.
   Check the calibration of this meter periodically.

1-1-3. Fire and Shock Hazard

Before returning the LED TV to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the LED TV.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistorcapacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):
   WARNING : Do not use an isolation transformer during this test.
   Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

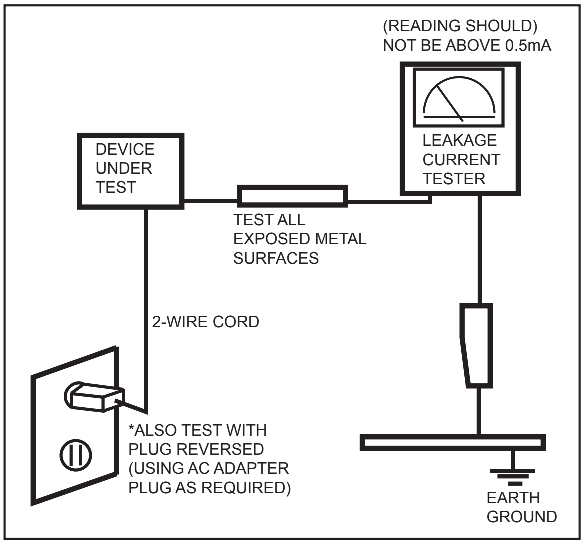


Figure 1-1. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts.
   The current measured should not exceed 0.5 milliamp.
   Reverse the power-plug prongs in the AC outlet and repeat the test.

1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safetyrelated characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by ⚠ on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2. Servicing Precautions

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.
Caution: Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.
Note: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

1-2-1 General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to:
   (a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.
2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to theblades of the AC plug.
   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3. Electrostatically Sensitive Devices (ESD) Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the LED TV.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   Caution: Be sure no power is applied to the chassis or circuit and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4. Installation Precautions

1. For safety reasons, more than a people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.
4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.
5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.
6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.
7. When installing the product, leave enough space (0.4m) between the product and the wall for ventilation purposes.
   A rise in temperature within the product may cause fire.

2. Product specifications

2-1. Feature & Specifications

Model	UA22C4000P
Feature	
▶ RF, 1-HDMI, 1-Component, 1-A/V , 1-USB2.0, D-SUB, Optical, Headphone ▶ Brightness : 400cd/m^2 ▶ Response Time : 4.5ms	

Specifications		
Item	**Description**	
LCD Panel	22inch HD 50/60Hz	
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)	
Display Colors	16.7M color	
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	74.25MHz	
Active Display Horizontal/Vertical	18.80 x 10.57 inches(477.417(H) x 268.416(V) mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz	
Power Consumption	Under 60W (Under 0.3W, Stand by)	
Dimensions Set (W x D x H)	21.5 x 7.5 x 16.2 inches (545.2 x 189.5 x 411.1 mm)_with stand 21.5 x 1.2 x 14.1 inches (545.2 x 29.9 x 359.0 mm)_without stand	
Weight	12.6 lbs(5.7kg)_with stand 9.0 lbs(4.1kg)_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	PAL, SECAM, NT4.43,NT3.58
	Sound	BG, DK, M, I
Environmental Considerations	Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C) Operating Humidity : 10% ~ 90% Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C) Storage Humidity: 10% ~ 90%	
Audio Spec.	- MAX Internal Audio Output Power : Each 3W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz	
Note: Dolby Digital Plus/Pluse, Game Mode, Film Mode, Energy Saving, Anynet$^+$		

Model	UA26C4000P
Feature	
▶ RF, 3-HDMI, 1-Component, 1-A/V , 1-USB2.0, D-SUB, Optical, Headphone ▶ Brightness : 400 cd/m^2 ▶ Response Time : 4.5ms	

Specifications		
Item	**Description**	
LCD Panel	26inch HD 50/60Hz	
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)	
Display Colors	16.7M color	
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	74.25MHz	
Active Display Horizontal/Vertical	22.67 x 12.74 inches(575.769(H) x 323.712(V) mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz	
Power Consumption	Under 65W (Under 0.3W, Stand by)	
Dimensions Set (W x D x H)	25.7 x 8.7 x 18.9 inches (652.8 x 222.0 x 479.8 mm)_with stand 25.7 x 1.2 x 16.6 inches (652.8 x 29.9 x 422.8 mm)_without stand	
Weight	21.4 lbs (9.7kg)_with stand 13.7 lbs (6.2kg)_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	PAL, SECAM, NT4.43,NT3.58
	Sound	BG, DK, M, I
Environmental Considerations	Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C) Operating Humidity : 10% ~ 90% Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C) Storage Humidity: 10% ~ 90%	
Audio Spec.	- MAX Internal Audio Output Power : Each 5W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz	
Note: Dolby Digital Plus/Pluse, Game Mode, Film Mode, Energy Saving, Anynet$^+$		

Model	UA32C4000P
Feature	
▶ RF, 3-HDMI, 1-Component, 1-A/V , 1-USB2.0, D-SUB ▶ Brightness : 400cd/m^2 ▶ Response Time : 4.5ms	

Specifications		
Item	**Description**	
LCD Panel	32inch HD 50/60Hz	
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)	
Display Colors	16.7M color	
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	76MHz	
Active Display Horizontal/Vertical	28.91 x 16.94 inches (734.4 (H) x 430.3 (V) mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz	
Power Consumption	Under 100W (Under 0.3W, Stand by)	
Dimensions Set (W x D x H)	774.6 x 549.1 x 255.0 mm _with stand 774.6 x 491.8 x 29.9 mm _without stand	
Weight	9.2kg _with stand 8.4kg _without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	PAL, SECAM, NT4.43,NT3.58
	Sound	BG, DK, M, I
Environmental Considerations	Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C) Operating Humidity : 10% ~ 90% Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C) Storage Humidity: 10% ~ 90%	
Audio Spec.	- MAX Internal Audio Output Power : Each 10W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz	
Note: Dolby Digital Plus/Pluse, Game Mode, Film Mode, Energy Saving, Anynet+		

2-2. Specification Comparison to Old Models

※ O : application, X : non-application

Model	UC4Q(UA**C4000P)	LB4B(LA**B450B1)
Design		
Display Type	LED TV	LCD TV
Built-in Tuner	O	O
Resolution	1366 x 768	1366 x 768
LCD Panel	TFT LED Panel 50/60Hz	TFT LCD Panel 50/60Hz
Screen Size	22"/26"/32"	26"/32"/37"/40"
Picture ratio	16 : 9	16 : 9
Dimensions (W x H x D)	22" 21.5 x 7.5 x 16.2 inches _with stand 26" 25.7 x 8.7 x 18.9 inches _with stand 32" 30.5 x 10.0 x 21.6 inches _with stand	26" 26.0 x 8.5 x 19.4 inches _with stand 32" 31.4 x 9.4 x 22.8 inches _with stand
Weight	22" 4.1kg_with stand 26" 6.2kg_with stand 32" 9.2kg_with stand	26" 6.5kg_with stand 32" 11.4kg_with stand
Brightness	400 cd/m^2	500 cd/m^2
Picture Enhacer	DNIe (SX1 / X4)	DNIe (Lola3)
Equalizer	5 Band	5 Band
Auto Volume Control	O	O
Surround Sound	Dolby Digital Plus/Pluse	SRS TruSurround HD & Dolby Digital
Speaker Output	22" 3W / 26" 5W / 32" 10W	10W + 10W
PIP	O	O
Caption	O	O
Entertainment Mode	X	X
Game Mode	O	O
Energy Saving	O	O
Anynet+	O	O
Antenna	1	1

2-3. Detail Factory Option

※ If you replace the main board with new one, please change the factory option as well.
The options you must change are "Type, "Local set" and "Front Color".

Model Name			**UA22C4000P**	**UA26C4000P**	**UA32C4000P**
Panel		Vendor	CMO	CMO	CMO
		CODE	BN07-00865A	BN07-00847A	BN07-00848A
		SPEC	22P6TH0E	26P6AH0E	32P6AG0E
SMPS		IP Board (SEC)	BN44-00347A	BN44-00349A	BN44-00349A
Byte	**Item**	CHASSIS ASS'Y	-	-	-
		PBA ASSY CODE	-	-	-
0	Factory Reset	-	-	-	-
1	Type		22A6AH0C	22P6TH0E	32P6AG0E
2	Local Set		Depending on country	Depending on country	Depending on country
3	Model		UC4000	UC4000	UC4000
4	Tuner		DRXKSEMCO	DRXKSEMCO	DRXKSEMCO
5	DDR		0	0	0
6	Light Effect		OFF	OFF	OFF
7	Ch Table		Depending on country	Depending on country	Depending on country
8	Country		…	…	…
9	Front Color		T-R-BLK	T-R-BLK	T-R-BLK

■ CHANNEL FREQUENCY TABLE

1. OUTPUT FREQUENCY : ANALOG fv:45.75MHz, fs:41.25MHz DIGITAL Fc:44MHz
2. TUNING STEP SIZE : FIRST PLL 250KHz SECOND PLL 62.5KHz

(Unit : MHz)

CH Number	AREA									
	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
C00	-	-	-	-	-	-	-	-	-	-
C01	46.25	VHF	49.75	VHF	49.75	VHF	44.25	VHF	-	-
C02	48.25	VHF	59.25	V-L	59.25	V-L	55.25	V-L	-	-
C03	55.25	V-L	77.25	V-L	77.25	V-L	62.25	V-L	-	-
C04	62.25	V-L	85.25	V-L	85.25	V-L	175.25	V-H	175.25	V-H
C05	175.25	V-H	93.25	VHF	93.25	VHF	182.25	V-H	183.25	V-H
C06	182.25	V-H	175.25	V-H	175.25	V-H	189.25	V-H	191.25	V-H
C07	189.25	V-H	183.25	V-H	183.25	V-H	196.25	V-H	199.25	V-H
C08	196.25	V-H	191.25	V-H	191.25	V-H	203.25	V-H	207.25	V-H
C09	203.25	V-H	199.25	V-H	199.25	V-H	210.25	V-H	215.25	V-H
C10	210.25	V-H	207.25	V-H	207.25	V-H	217.25	VHF	223.25	VHF
C11	217.25	VHF	215.25	V-H	215.25	V-H	224.25	VHF	231.25	VHF
C12	224.25	VHF	223.25	VHF	223.25	VHF	45.25	VHF	239.25	VHF
C13	53.75	VHF	53.75	VHF	45.75	VHF	-	-	247.25	VHF
C14	-	-	62.25	V-L	53.75	VHF	-	-	-	-
C15	82.25	V-L	82.25	V-L	61.75	V-L	-	-	-	-
C16	-	-	-	-	-	-	69.75	V-L	-	-
C17	183.75	V-H	183.75	V-H	95.75	VHF	-	-	-	-
C18	192.25	V-H	192.25	V-H	-	-	-	-	-	-
C19	201.25	V-H	-	-	201.25	V-H	-	-	-	-
C20	-	-	210.25	V-H	-	-	-	-	-	-
C21	471.25	UHF	471.25	UHF	471.25	UHF	471.25	UHF	471.25	UHF
C22	479.25	UHF	479.25	UHF	479.25	UHF	479.25	UHF	479.25	UHF
C23	487.25	UHF	487.25	UHF	487.25	UHF	487.25	UHF	487.25	UHF
C24	495.25	UHF	495.25	UHF	495.25	UHF	495.25	UHF	495.25	UHF
C25	503.25	UHF	503.25	UHF	503.25	UHF	503.25	UHF	503.25	UHF
C26	511.25	UHF	511.25	UHF	511.25	UHF	511.25	UHF	511.25	UHF
C27	519.25	UHF	519.25	UHF	519.25	UHF	519.25	UHF	519.25	UHF
C28	527.25	UHF	527.25	UHF	527.25	UHF	527.25	UHF	527.25	UHF
C29	535.25	UHF	535.25	UHF	535.25	UHF	535.25	UHF	535.25	UHF
C30	543.25	UHF	543.25	UHF	543.25	UHF	543.25	UHF	543.25	UHF
C31	551.25	UHF	551.25	UHF	551.25	UHF	551.25	UHF	551.25	UHF
C32	559.25	UHF	559.25	UHF	559.25	UHF	559.25	UHF	559.25	UHF
C33	567.25	UHF	567.25	UHF	567.25	UHF	567.25	UHF	567.25	UHF
C34	575.25	UHF	575.25	UHF	575.25	UHF	575.25	UHF	575.25	UHF
C35	583.25	UHF	583.25	UHF	583.25	UHF	583.25	UHF	583.25	UHF
C36	591.25	UHF	591.25	UHF	591.25	UHF	591.25	UHF	591.25	UHF
C37	599.25	UHF	599.25	UHF	599.25	UHF	599.25	UHF	599.25	UHF
C38	607.25	UHF	607.25	UHF	607.25	UHF	607.25	UHF	607.25	UHF
C39	615.25	UHF	615.25	UHF	615.25	UHF	615.25	UHF	615.25	UHF
C40	623.25	UHF	623.25	UHF	623.25	UHF	623.25	UHF	623.25	UHF
C41	631.25	UHF	631.25	UHF	631.25	UHF	631.25	UHF	631.25	UHF
C42	639.25	UHF	639.25	UHF	639.25	UHF	639.25	UHF	639.25	UHF
C43	647.25	UHF	647.25	UHF	647.25	UHF	647.25	UHF	647.25	UHF
C44	655.25	UHF	655.25	UHF	655.25	UHF	655.25	UHF	655.25	UHF
C45	663.25	UHF	663.25	UHF	663.25	UHF	663.25	UHF	663.25	UHF
C46	671.25	UHF	671.25	UHF	671.25	UHF	671.25	UHF	671.25	UHF
C47	679.25	UHF	679.25	UHF	679.25	UHF	679.25	UHF	679.25	UHF
C48	687.25	UHF	687.25	UHF	687.25	UHF	687.25	UHF	687.25	UHF
C49	695.25	UHF	695.25	UHF	695.25	UHF	695.25	UHF	695.25	UHF
C50	703.25	UHF	703.25	UHF	703.25	UHF	703.25	UHF	703.25	UHF
C51	711.25	UHF	711.25	UHF	711.25	UHF	711.25	UHF	711.25	UHF
C52	719.25	UHF	719.25	UHF	719.25	UHF	719.25	UHF	719.25	UHF
C53	727.25	UHF	727.25	UHF	727.25	UHF	727.25	UHF	727.25	UHF
C54	735.25	UHF	735.25	UHF	735.25	UHF	735.25	UHF	735.25	UHF
C55	743.25	UHF	743.25	UHF	743.25	UHF	743.25	UHF	743.25	UHF
C56	751.25	UHF	751.25	UHF	751.25	UHF	751.25	UHF	751.25	UHF
C57	759.25	UHF	759.25	UHF	759.25	UHF	759.25	UHF	759.25	UHF
C58	767.25	UHF	767.25	UHF	767.25	UHF	767.25	UHF	767.25	UHF
C59	775.25	UHF	775.25	UHF	775.25	UHF	775.25	UHF	775.25	UHF
C60	783.25	UHF	783.25	UHF	783.25	UHF	783.25	UHF	783.25	UHF

(Unit : MHz)

CH Number	AREA									
	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
C61	791.25	UHF	791.25	UHF	791.25	UHF	791.25	UHF	791.25	UHF
C62	799.25	UHF	799.25	UHF	799.25	UHF	799.25	UHF	799.25	UHF
C63	807.25	UHF	807.25	UHF	807.25	UHF	807.25	UHF	807.25	UHF
C64	815.25	UHF	815.25	UHF	815.25	UHF	815.25	UHF	815.25	UHF
C65	823.25	UHF	823.25	UHF	823.25	UHF	823.25	UHF	823.25	UHF
C66	831.25	UHF	831.25	UHF	831.25	UHF	831.25	UHF	831.25	UHF
C67	839.25	UHF	839.25	UHF	839.25	UHF	839.25	UHF	839.25	UHF
C68	847.25	UHF	847.25	UHF	847.25	UHF	847.25	UHF	847.25	UHF
C69	855.25	UHF	855.25	UHF	855.25	UHF	855.25	UHF	855.25	UHF
C70	-	-	-	-	-	-	53.75	-	53.75	-
C71	-	-	-	-	62.25	VHF	-	-	62.25	VHF
C72	-	-	-	-	82.25	V-L	82.25	V-L	82.25	V-L
C73	-	-	-	-	-	-	-	-	-	-
C74	69.75	V-L	-	-	-	-	183.25	V-H	-	-
C75	76.25	V-L	-	-	192.25	V-H	192.25	V-H	192.25	V-H
C76	83.25	V-L	-	-	201.25	V-H	201.25	V-H	201.25	V-H
C77	90.25	VHF	-	-	210.25	V-H	-	-	210.25	V-H
C78	97.25	VHF	217.25	VHF	217.25	VHF	-	-	217.25	VHF
C79	59.25	V-L	224.25	VHF	224.25	VHF	-	-	224.25	VHF
C80	-	-	93.25	VHF	-	-	-	-	-	-
C81	49.75	VHF	-	-	-	-	49.75	VHF	49.75	VHF
C82	-	-	-	-	-	-	59.25	V-L	59.25	V-L
C83	77.25	V-L	-	-	77.25	V-L	77.25	V-L	77.25	V-L
C84	85.25	V-L	-	-	85.25	V-L	85.25	V-L	85.25	V-L
C85	-	-	-	-	93.25	VHF	93.25	VHF	93.25	VHF
C86	-	-	-	-	-	-	-	-	-	-
C86	183.25	V-H	-	-	-	-	-	-	-	-
C86	191.25	V-H	-	-	-	-	191.25	V-H	-	-
C86	199.25	V-H	-	-	199.25	V-H	199.25	V-H	-	-
C86	207.25	V-H	-	-	207.25	V-H	207.25	V-H	-	-
C86	215.25	VHF	-	-	-	-	215.25	VHF	215.25	VHF
C86	223.25	VHF	-	-	-	-	223.25	VHF	223.25	VHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
C00	46.25	VHF	-	-	-	-
C01	57.25	V-L	49.75	VHF	-	-
C02	64.25	V-L	57.75	V-L	55.25	V-L
C03	86.25	V-L	65.75	V-L	61.25	V-L
C04	95.25	VHF	77.25	V-L	67.25	V-L
C05	102.25	VHF	85.25	V-L	77.25	V-L
C06	175.25	V-H	168.25	VHF	83.25	V-L
C07	182.25	V-H	176.25	V-H	175.25	V-H
C08	189.25	V-H	184.25	V-H	181.25	V-H
C09	196.25	V-H	192.25	V-H	187.25	V-H
C10	209.25	V-H	200.25	V-H	193.25	V-H
C11	216.25	VHF	208.25	VHF	199.25	VHF
C12	224.25	VHF	216.25	VHF	205.25	VHF
C13	138.25	V-H	471.25	UHF	211.25	VHF
C14	203.25	V-H	479.25	UHF	471.25	UHF
C15	-	-	487.25	UHF	477.25	UHF
C16	-	-	495.25	UHF	483.25	UHF
C17	-	-	503.25	UHF	489.25	UHF
C18	-	-	511.25	UHF	495.25	UHF
C19	-	-	519.25	UHF	501.25	UHF
C20	-	-	527.25	UHF	507.25	UHF
C21	x	-	535.25	UHF	513.25	UHF
C22	x	-	543.25	UHF	519.25	UHF
C23	x	-	551.25	UHF	525.25	UHF
C24	x	-	559.25	UHF	531.25	UHF
C25	x	-	607.25	UHF	537.25	UHF
C26	x	-	615.25	UHF	543.25	UHF
C27	x	-	623.25	UHF	549.25	UHF
C28	527.25	UHF	631.25	UHF	555.25	UHF
C29	534.25	UHF	639.25	UHF	561.25	UHF
C30	541.25	UHF	647.25	UHF	567.25	UHF
C31	548.25	UHF	655.25	UHF	573.25	UHF
C32	555.25	UHF	663.25	UHF	579.25	UHF
C33	562.25	UHF	671.25	UHF	585.25	UHF
C34	569.25	UHF	679.25	UHF	591.25	UHF
C35	576.25	UHF	687.25	UHF	597.25	UHF
C36	583.25	UHF	695.25	UHF	603.25	UHF
C37	590.25	UHF	703.25	UHF	609.25	UHF
C38	597.25	UHF	711.25	UHF	615.25	UHF
C39	604.25	UHF	719.25	UHF	621.25	UHF
C40	611.25	UHF	727.25	UHF	627.25	UHF
C41	618.25	UHF	735.25	UHF	633.25	UHF
C42	625.25	UHF	743.25	UHF	639.25	UHF
C43	632.25	UHF	751.25	UHF	645.25	UHF
C44	639.25	UHF	759.25	UHF	651.25	UHF
C45	646.25	UHF	767.25	UHF	657.25	UHF
C46	653.25	UHF	775.25	UHF	663.25	UHF
C47	660.25	UHF	783.25	UHF	669.25	UHF
C48	667.25	UHF	791.25	UHF	675.25	UHF
C49	674.25	UHF	799.25	UHF	681.25	UHF
C50	681.25	UHF	807.25	UHF	687.25	UHF
C51	688.25	UHF	815.25	UHF	693.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
C52	695.25	UHF	823.25	UHF	699.25	UHF
C53	702.25	UHF	831.25	UHF	705.25	UHF
C54	709.25	UHF	839.25	UHF	711.25	UHF
C55	716.25	UHF	847.25	UHF	717.25	UHF
C56	723.25	UHF	855.25	UHF	723.25	UHF
C57	730.25	UHF	863.25	UHF	729.25	UHF
C58	737.25	UHF	-	-	735.25	UHF
C59	744.25	UHF	-	-	741.25	UHF
C60	751.25	UHF	-	-	747.25	UHF
C61	758.25	UHF	-	-	753.25	UHF
C62	765.25	UHF	-	-	759.25	UHF
C63	772.25	UHF	-	-	765.25	UHF
C64	779.25	UHF	-	-	771.25	UHF
C65	786.25	UHF	567.25	UHF	777.25	UHF
C66	793.25	UHF	575.25	UHF	783.25	UHF
C67	800.25	UHF	583.25	UHF	789.25	UHF
C68	807.25	UHF	591.25	UHF	795.25	UHF
C69	814.25	UHF	599.25	UHF	801.25	UHF
C70	53.75	-	-	-	807.25	UHF
C71	62.25	VHF	-	-	813.25	UHF
C72	82.25	V-L	-	-	819.25	UHF
C73	-	-	-	-	825.25	UHF
C74	183.25	-	-	-	831.25	UHF
C75	192.25	V-H	-	-	837.25	UHF
C76	201.25	V-H	-	-	843.25	UHF
C77	-	V-H	-	-	849.25	UHF
C78	-	VHF	-	-	855.25	UHF
C79	-	VHF	-	-	861.25	UHF
C80	-	-	-	-	867.25	UHF
C81	49.75	VHF	-	-	873.25	UHF
C82	59.25	V-L	-	-	879.25	UHF
C83	77.25	V-L	-	-	885.25	UHF
C84	85.25	V-L	-	-	-	-
C85	93.25	VHF	-	-	-	-
C86	-	-	-	-	-	-
C86	-	-	-	-	-	-
C86	191.25	-	-	-	-	-
C86	199.25	-	-	-	-	-
C86	207.25	-	-	-	-	-
C86	215.25	VHF	-	-	-	-
C86	223.25	VHF	-	-	-	-

Cable CHANNEL

(Unit : MHz)

CH Number	AREA									
	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
S01	105.25	VHF	103.25	VHF	103.25	VHF	105.25	VHF	105.25	VHF
S02	112.25	VHF	111.25	VHF	111.25	VHF	112.25	VHF	112.25	VHF
S03	119.25	VHF	119.25	VHF	119.25	VHF	119.25	VHF	119.25	VHF
S04	126.25	VHF	127.25	VHF	127.25	VHF	126.25	VHF	126.25	VHF
S05	133.25	VHF	135.25	VHF	135.25	VHF	133.25	VHF	133.25	VHF
S06	140.25	VHF	143.25	VHF	143.25	VHF	140.25	VHF	140.25	VHF
S07	147.25	VHF	151.25	VHF	151.25	VHF	147.25	VHF	147.25	VHF
S08	154.25	VHF	159.25	VHF	159.25	VHF	154.25	VHF	154.25	VHF
S09	161.25	VHF	167.25	VHF	167.25	VHF	161.25	VHF	161.25	VHF
S10	168.25	VHF	231.25	VHF	231.25	VHF	168.25	VHF	168.25	VHF
S11	231.25	VHF	239.25	VHF	239.25	VHF	231.25	VHF	231.25	VHF
S12	238.25	VHF	247.25	VHF	247.25	VHF	238.25	VHF	238.25	VHF
S13	245.25	VHF	253.25	VHF	253.25	VHF	245.25	VHF	245.25	VHF
S14	252.25	VHF	263.25	VHF	263.25	VHF	252.25	VHF	252.25	VHF
S15	259.25	VHF	271.25	VHF	271.25	VHF	259.25	VHF	259.25	VHF
S16	266.25	VHF	279.25	VHF	279.25	VHF	266.25	VHF	266.25	VHF
S17	273.25	VHF	287.25	VHF	287.25	VHF	273.25	VHF	273.25	VHF
S18	280.25	VHF	295.25	VHF	295.25	VHF	280.25	VHF	280.25	VHF
S19	287.25	VHF	303.25	UHF	303.25	UHF	287.25	VHF	287.25	VHF
S20	294.25	VHF	-	-	-	-	294.25	VHF	294.25	VHF
S21	303.25	UHF	-	-	-	-	303.25	UHF	303.25	UHF
S22	311.25	UHF	311.25	UHF	311.25	UHF	311.25	UHF	311.25	UHF
S23	319.25	UHF	319.25	UHF	319.25	UHF	319.25	UHF	319.25	UHF
S24	327.25	UHF	327.25	UHF	327.25	UHF	327.25	UHF	327.25	UHF
S25	335.25	UHF	335.25	UHF	335.25	UHF	335.25	UHF	335.25	UHF
S26	343.25	UHF	343.25	UHF	343.25	UHF	343.25	UHF	343.25	UHF
S27	351.25	UHF	351.25	UHF	351.25	UHF	351.25	UHF	351.25	UHF
S28	359.25	UHF	359.25	UHF	359.25	UHF	359.25	UHF	359.25	UHF
S29	367.25	UHF	367.25	UHF	367.25	UHF	367.25	UHF	367.25	UHF
S30	375.25	UHF	375.25	UHF	375.25	UHF	375.25	UHF	375.25	UHF
S31	383.25	UHF	383.25	UHF	383.25	UHF	383.25	UHF	383.25	UHF
S32	391.25	UHF	391.25	UHF	391.25	UHF	391.25	UHF	391.25	UHF
S33	399.25	UHF	399.25	UHF	399.25	UHF	399.25	UHF	399.25	UHF
S34	407.25	UHF	407.25	UHF	407.25	UHF	407.25	UHF	407.25	UHF
S35	415.25	UHF	415.25	UHF	415.25	UHF	415.25	UHF	415.25	UHF
S36	423.25	UHF	423.25	UHF	423.25	UHF	423.25	UHF	423.25	UHF
S37	431.25	UHF	431.25	UHF	431.25	UHF	431.25	UHF	431.25	UHF
S38	439.25	UHF	439.25	UHF	439.25	UHF	439.25	UHF	439.25	UHF
S39	447.25	UHF	447.25	UHF	447.25	UHF	447.25	UHF	447.25	UHF
S40	455.25	UHF	455.25	UHF	455.25	UHF	455.25	UHF	455.25	UHF
S41	463.25	UHF	463.25	UHF	463.25	UHF	463.25	UHF	463.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
S01	105.25	VHF	112.25	VHF	73.25	VHF
S02	112.25	VHF	120.25	VHF	55.25	VHF
S03	119.25	VHF	128.25	VHF	61.25	VHF
S04	126.25	VHF	136.25	VHF	67.25	VHF
S05	133.25	VHF	144.25	VHF	77.25	VHF
S06	140.25	VHF	152.25	VHF	83.25	VHF
S07	147.25	VHF	160.25	VHF	175.25	VHF
S08	154.25	VHF	224.25	VHF	181.25	VHF
S09	161.25	VHF	232.25	VHF	187.25	VHF
S10	168.25	VHF	240.25	VHF	193.25	VHF
S11	231.25	VHF	248.25	VHF	199.25	VHF
S12	238.25	VHF	256.25	VHF	205.25	VHF
S13	245.25	VHF	264.25	VHF	211.25	VHF
S14	252.25	VHF	272.25	VHF	121.25	VHF
S15	259.25	VHF	280.25	VHF	127.25	VHF
S16	266.25	VHF	288.25	VHF	133.25	VHF
S17	273.25	VHF	296.25	VHF	139.25	VHF
S18	280.25	VHF	304.25	UHF	145.25	VHF
S19	287.25	VHF	312.25	UHF	151.25	VHF
S20	294.25	VHF	320.25	UHF	157.25	VHF
S21	303.25	UHF	328.25	UHF	163.25	VHF
S22	311.25	UHF	336.25	UHF	169.25	VHF
S23	319.25	UHF	344.25	UHF	217.25	VHF
S24	327.25	UHF	352.25	UHF	223.25	VHF
S25	335.25	UHF	360.25	UHF	229.25	VHF
S26	343.25	UHF	368.25	UHF	235.25	VHF
S27	351.25	UHF	376.25	UHF	241.25	VHF
S28	359.25	UHF	384.25	UHF	247.25	VHF
S29	367.25	UHF	392.25	UHF	253.25	VHF
S30	375.25	UHF	400.25	UHF	259.25	VHF
S31	383.25	UHF	408.25	UHF	265.25	VHF
S32	391.25	UHF	416.25	UHF	271.25	VHF
S33	399.25	UHF	424.25	UHF	277.25	VHF
S34	407.25	UHF	432.25	UHF	283.25	VHF
S35	415.25	UHF	440.25	UHF	289.25	VHF
S36	423.25	UHF	448.25	UHF	295.25	VHF
S37	431.25	UHF	456.25	UHF	301.25	UHF
S38	439.25	UHF	x	x	307.25	UHF
S39	447.25	UHF	x	x	313.25	UHF
S40	455.25	UHF	x	x	319.25	UHF
S41	463.25	UHF	x	x	325.25	UHF
S42					331.25	UHF
S43					337.25	UHF
S44					343.25	UHF
S45					349.25	UHF
S46					355.25	UHF
S47					361.25	UHF
S48					367.25	UHF
S49					373.25	UHF
S50					379.25	UHF
S51					385.25	UHF
S52					391.25	UHF
S53					397.25	UHF
S54					403.25	UHF
S55					409.25	UHF
S56					415.25	UHF
S57					421.25	UHF
S58					427.25	UHF
S59					433.25	UHF
S60					439.25	UHF
S61					445.25	UHF
S62					451.25	UHF
S63					457.25	UHF
S64					463.25	UHF
S65					469.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
S66					475.25	UHF
S67					481.25	UHF
S68					487.25	UHF
S69					493.25	UHF
S70					499.25	UHF
S71					505.25	UHF
S72					511.25	UHF
S73					517.25	UHF
S74					523.25	UHF
S75					529.25	UHF
S76					535.25	UHF
S77					541.25	UHF
S78					547.25	UHF
S79					553.25	UHF
S80					559.25	UHF
S81					565.25	UHF
S82					571.25	UHF
S83					577.25	UHF
S84					583.25	UHF
S85					589.25	UHF
S86					595.25	UHF
S87					601.25	UHF
S88					607.25	UHF
S99					613.25	UHF
S90					619.25	UHF
S91					625.25	UHF
S92					631.25	UHF
S93					637.25	UHF
S94					643.25	UHF
S95					91.25	VHF
S96					97.25	VHF
S97					103.25	VHF
S98					109.25	VHF
S99					115.25	VHF

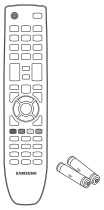
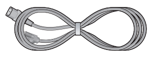
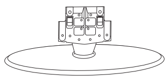
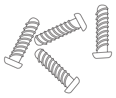
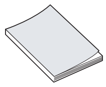
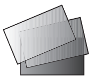
CATV CH mark (A row) : China area : attach ‘Z’

besides area : attach ‘S’

For example) China : Z10

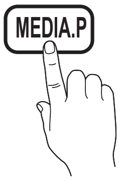
besides area : S10

2-4. Accessories

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-01019A	
	Power Cord	3903-000525	
	Stand	26", 32" : BN96-13156A 22" : BN96-10168C	Samsung Electronics Service center
	Screw (for the stand - M4, L6)	6003-000133	
	Owner's Instructions	BN68-02767A	
	Warranty Card / Registration Card / Safety Guide Manual (Not available in all locations)		

2-5. Media Play

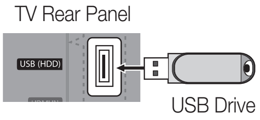
2-5-1. Using the Media Play Function



Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC) device.

Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music and/or movie files to the **USB 1(HDD)** jack on the side of the TV.
3. When USB is connected to the TV, popup window appears. Then you can select **Media Play**.



✎ It might not work properly with unlicenced multimedia files.

✎ Need-to-Know List before using **Media Play (USB)**

- MTP (Media Transfer Protocol) is not supported.
- The file system supports FAT16, FAT32 and NTFS.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- Media Play only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported). Devices should be connected directly to the TV's USB port.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- Connect a USB HDD to the dedicated port, **USB 1(HDD)** port.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360X8640 pixels.
- For unsupported or corrupted files, the "Not Supported File Format" message is displayed.
- If the files are sorted by Basic View, up to 1000 files can be displayed in each folder.
- MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation of content, the distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- If more than 2 PTP devices are connected, you can only use one at a time.
- If more than two MSC devices are connected, some of them may not be recognized. A USB device that requires high power (more than 500mA or 5V) may not be supported.

- **Supported Video Formats**

File Extention	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbsp)	Audio Codec
*.avi *.mkv	AVI MKV	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / DTS HD
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.asf	ASF	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / WMA
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP / MP / HP	1920x1080	6 ~ 30	8	MP3 / ADPCM / AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		XVID	1920x1080	6 ~ 30	8	
*.3gp	3GPP	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	ADPCM / AAC / HE-AAC / QCELP / AMR NB/WB
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.vro	VRO VOB	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM
		MPEG2	1920x1080	24 / 25 / 30	30	
*.mpg *.mpeg	PS	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM / AAC
		MPEG2	1920x1080	24 / 25 / 30	30	
		H.264	1920x1080	6 ~ 30	25	
*.ts *.tp *.trp	TS	MPEG2	1920x1080	24 / 25 / 30	30	AC3 / AAC / MP3 / DD+ / HE-AAC
		H.264	1920x1080	6 ~ 30	25	
		VC1	1920x1080	6 ~ 30	25	

Other Restrictions

✎ **NOTE**

- If there are problems with the contents of a codec, the codec will not be supported.
- If the information for a Container is incorrect and the file is in error, the Container will not be able to play correctly.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Fram/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.

Video Decoder	Audio Decoder
• Supports up to H.264, Level 4.1 • H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. • GMC 2 over is not support. • H.263 is not supported.	• Supports up to WMA 7, 8, 9, STD • WMA 9 PRO does not support 2 channel excess multi channel or lossless audio. • WMA sampling rate 22050Hz mono is not supported.

4.故障排除

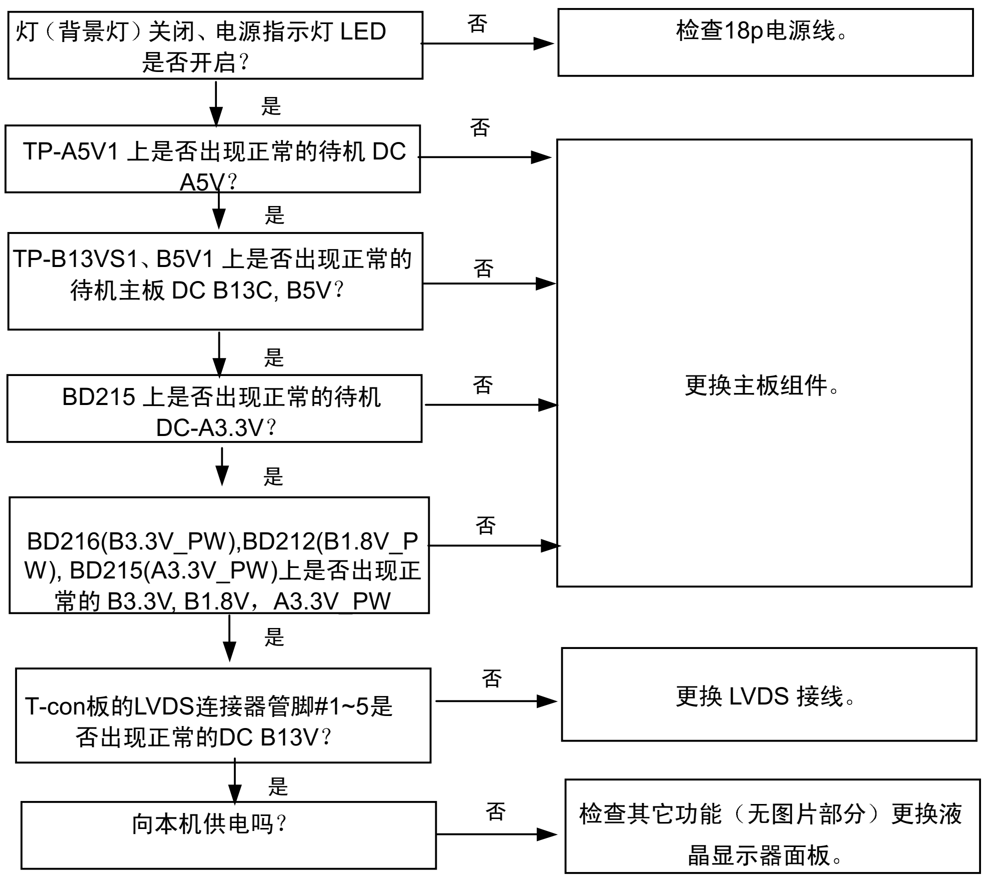
4-1.故障排除

4-1-1.预前检查

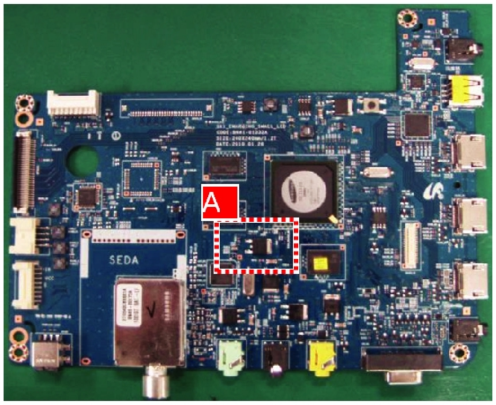
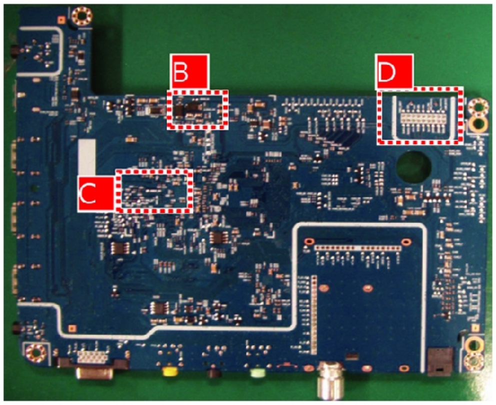
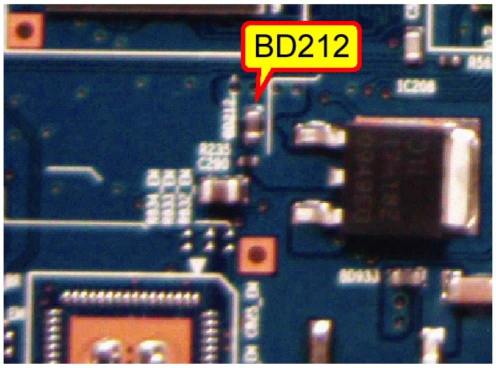
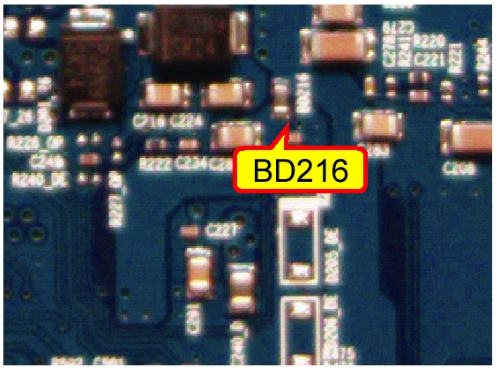
1. 首先检查各电缆连接情况。
   • 检查是否有烧坏或损坏的接线。
   • 检查接线是否断开，或连接处太松。
   • 检查是否依据连接图连接接线。

2. 检查主板的电源输入。

4-1-2.未通电（SX1）

<table>
<tr><td>征兆</td><td>-当连接电源线时，前面板上的 LED 指示灯未工作。
-当连接电源线时，SMPS 继电器未工作。
-本机似乎损坏。</td></tr>
<tr><td>主要检查点</td><td>如果接线连接不当或主板或 SMPS 有故障，当连接电源线时，前面板上的 IP 继电器或 LED 指示灯不工作。在这种情况下，检查下列各项：
-检查本机内部接线连接状态。
-检查各零件的保险丝。
-检查 SMPS 的输出电压。
-更换主板。</td></tr>
<tr><td>诊断</td><td>


</td></tr>
<tr><td>小心</td><td>在 IP 板上工作之前，必须断电。</td></tr>
</table>

<table>
<tr><th colspan="4">位置（主板）</th></tr>
<tr><td>顶部</td><td>
</td><td>底部</td><td>
</td></tr>
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td>
</td><td>B</td><td>
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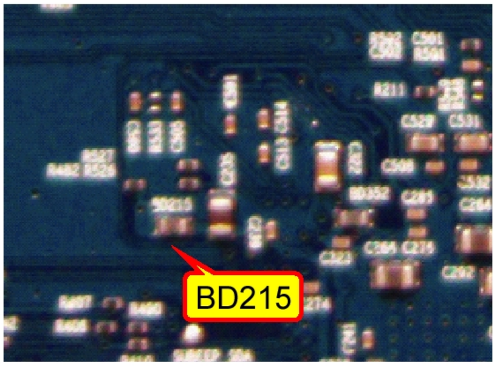
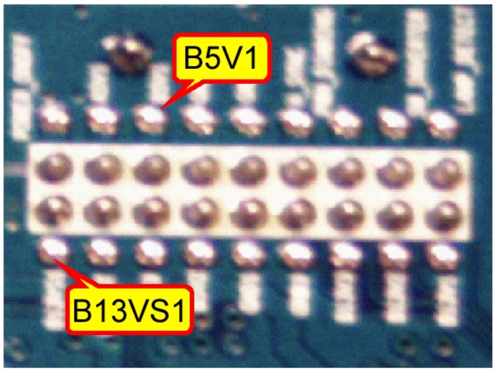
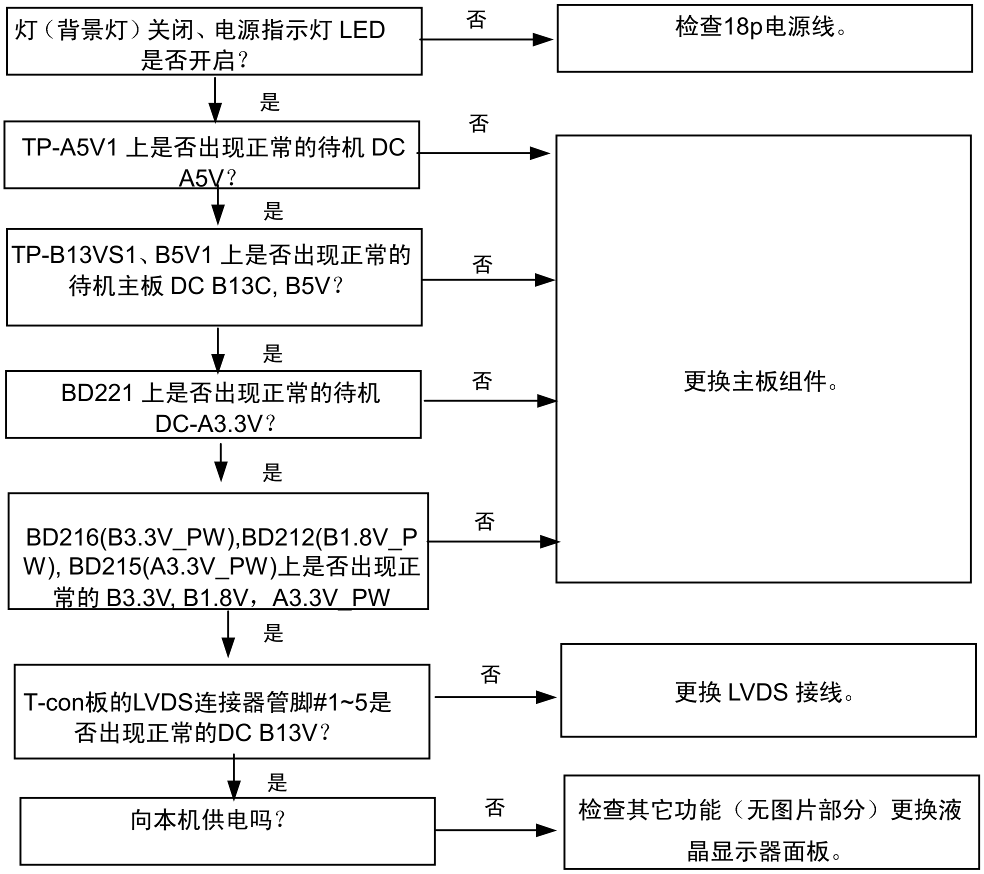
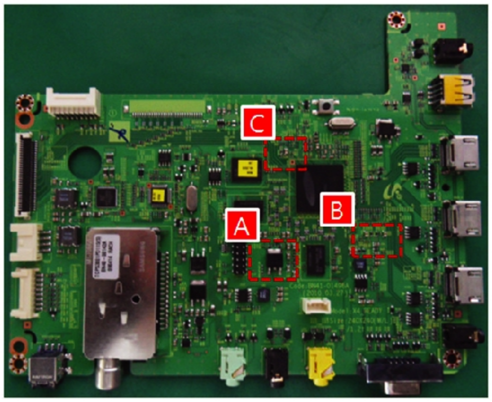
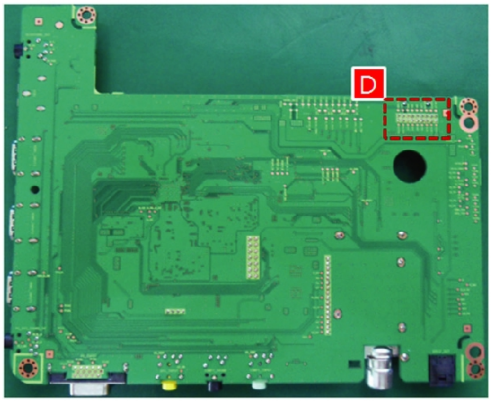
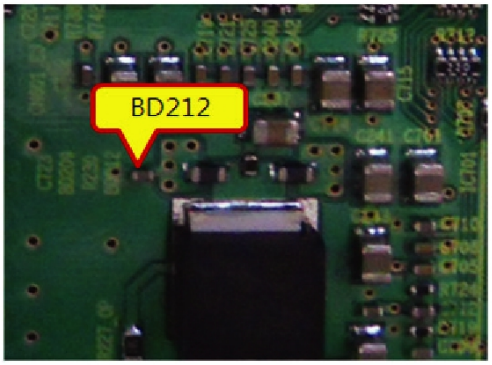
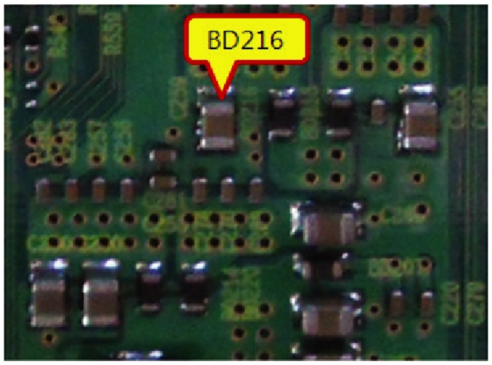
<tr><td>C</td><td>
</td><td>D</td><td>
</td></tr>
</table>

4-1-2.未通电（X4）

征兆	-当连接电源线时，前面板上的 LED 指示灯未工作。 -当连接电源线时，SMPS 继电器未工作。 -本机似乎损坏。
主要检查点	如果接线连接不当或主板或 SMPS 有故障，当连接电源线时，前面板上的 IP 继电器或 LED 指示灯不工作。在这种情况下，检查下列各项： -检查本机内部接线连接状态。 -检查各零件的保险丝。 -检查 SMPS 的输出电压。 -更换主板。
诊断	
小心	在 IP 板上工作之前，必须断电。

<table>
<tr><th colspan="4">位置（主板）</th></tr>
<tr><td>顶部</td><td>
</td><td>底部</td><td>
</td></tr>
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td>
</td><td>B</td><td>
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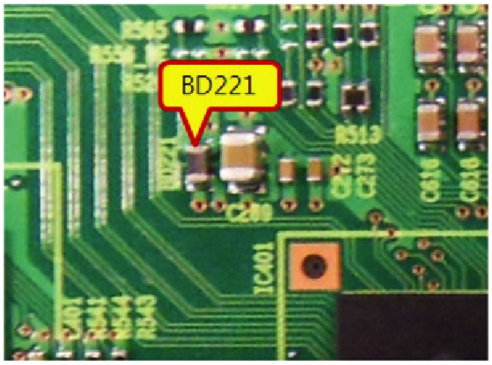
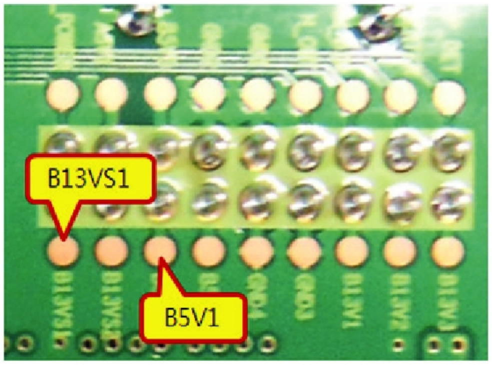
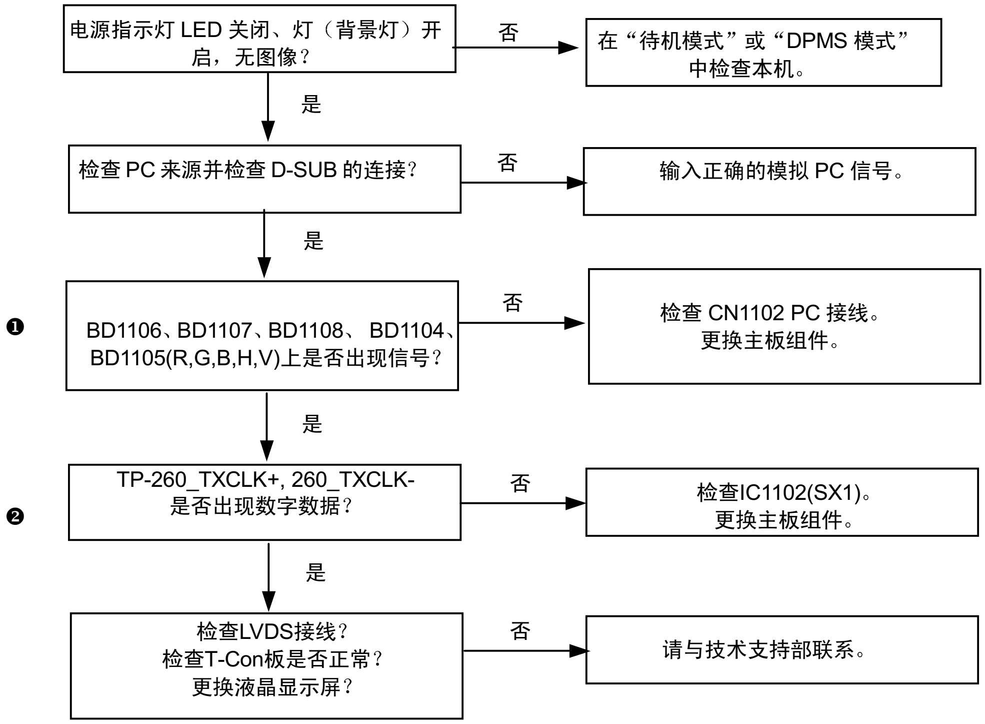
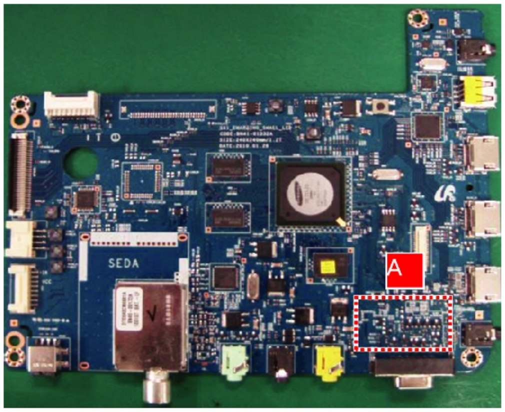
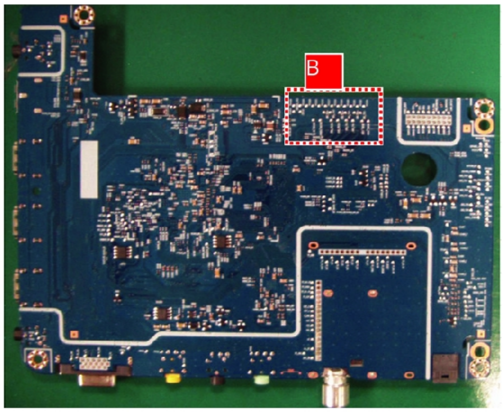
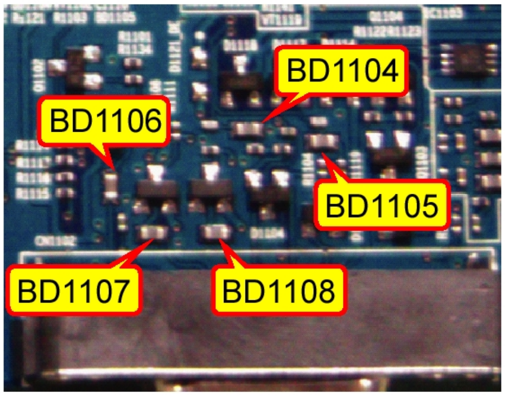
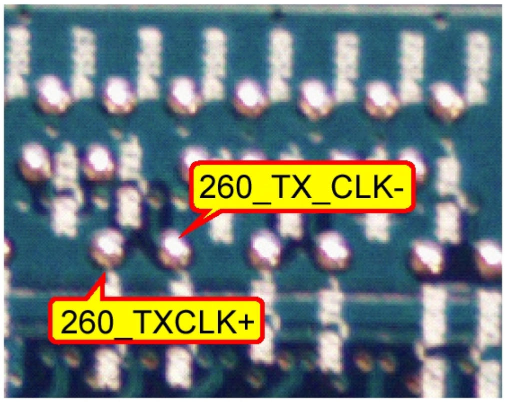
<tr><td>C</td><td>
</td><td>D</td><td>
</td></tr>
</table>

4-1-3.无图像_模拟PC信号（SX1）

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查PC来源
-检查Arsenal,检查Chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>
</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
</table>

<table>
<tr><th colspan="4">位置（主板）</th></tr>
<tr><td>顶部</td><td>
</td><td>底部</td><td>
</td></tr>
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td>
</td><td>B</td><td>
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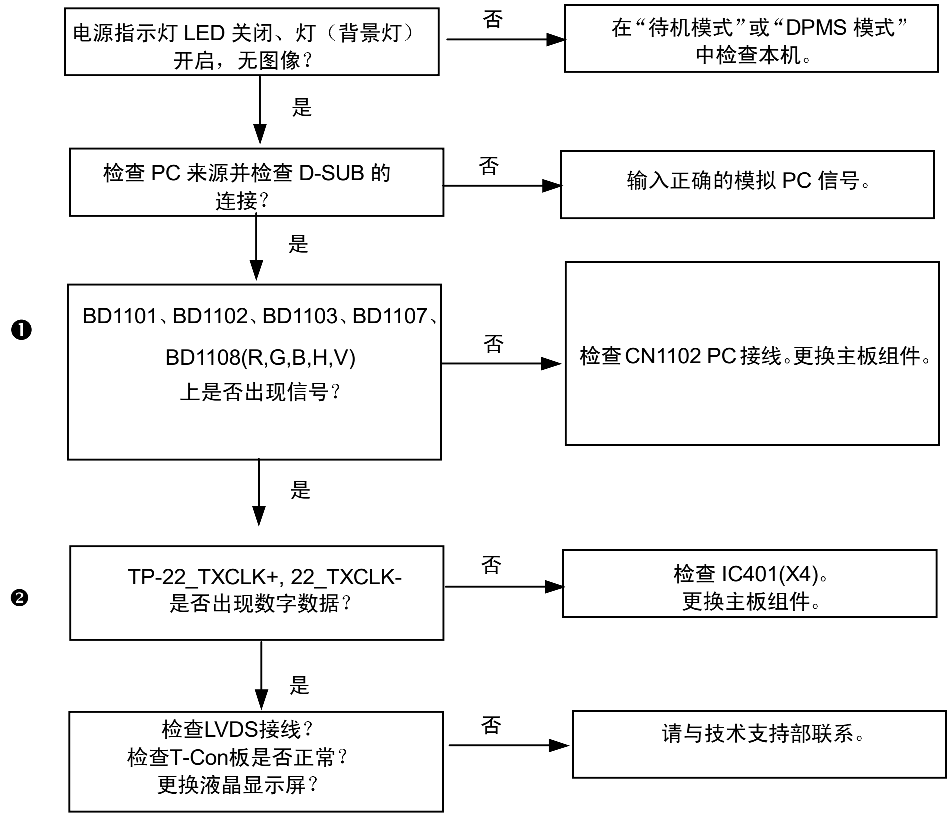
4-1-3.无图像_模拟PC信号（X4）

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查PC来源
-检查Arsenal,检查Chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>
</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
</table>

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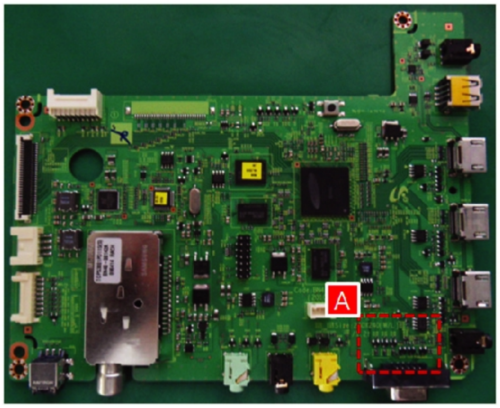
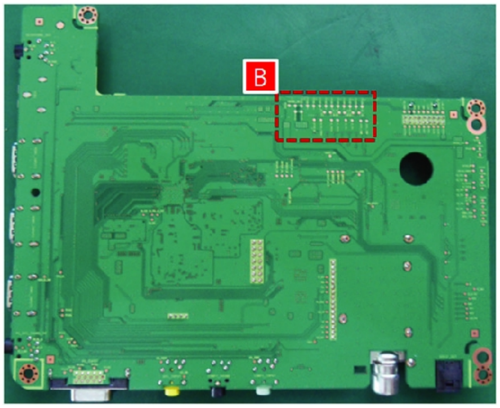
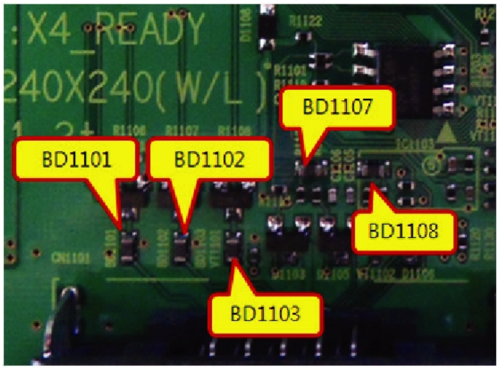
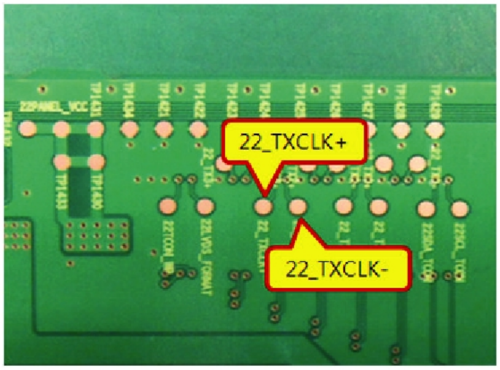
<tr><th colspan="4">位置（主板）</th></tr>
<tr><td>顶部</td><td></td><td>底部</td><td></td></tr>
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td></td><td>B</td><td></td></tr>
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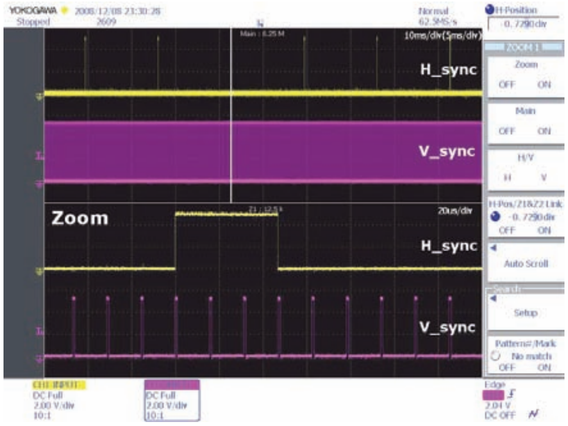
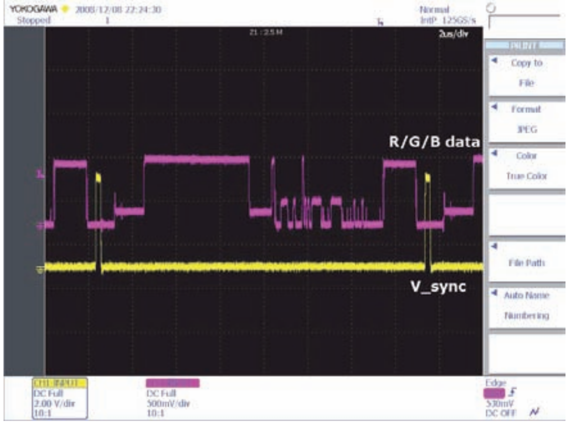
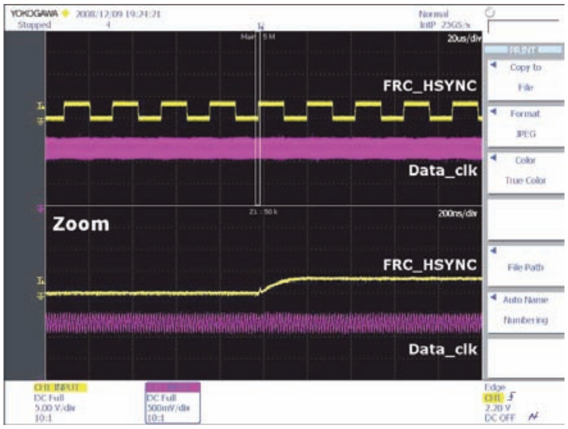
波形

❶ PC输入(V-sink , H-sink , R/G/B)

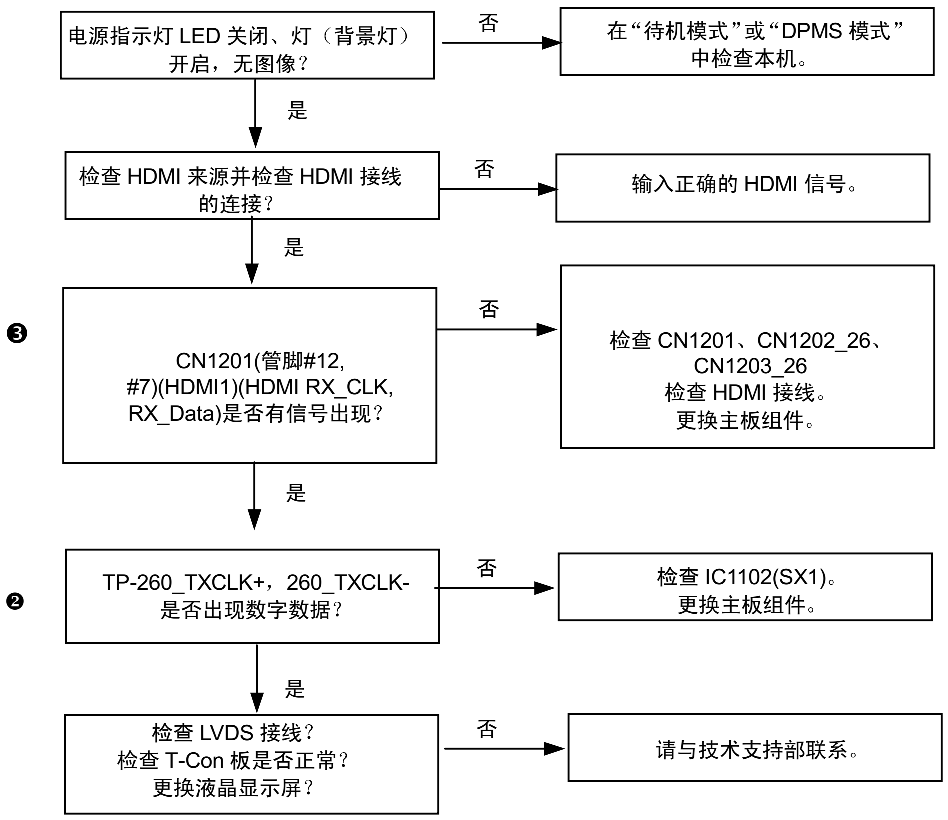




❷ LVDS输出



4-1-4.无图像_HDMI1,2-数字信号（SX1）

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查HDMI来源
-检查HDMI开关，检查Chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>
</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
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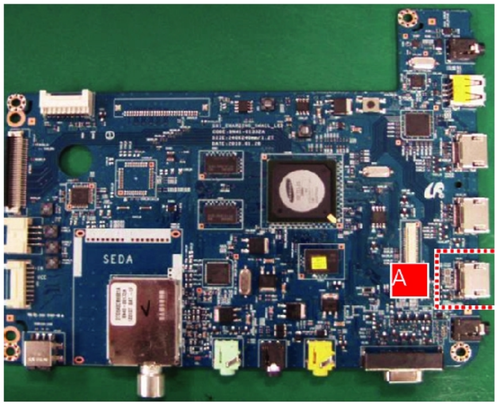
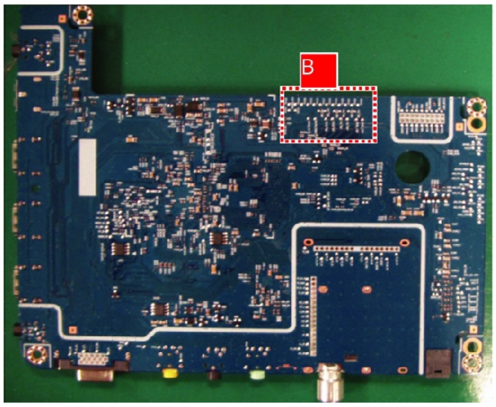
<tr><td>顶部</td><td>
</td><td>底部</td><td>
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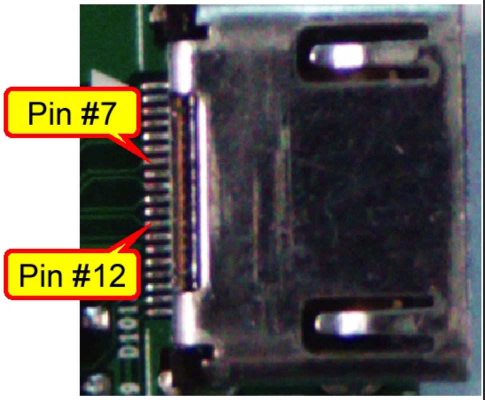
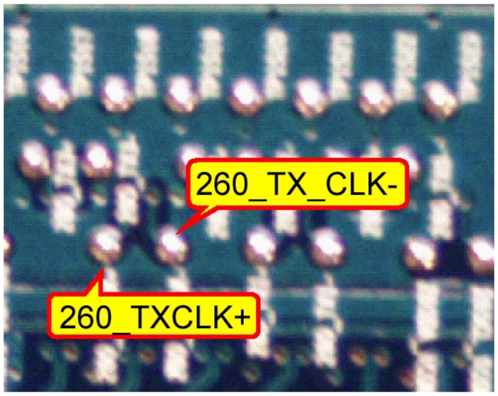
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td>
</td><td>B</td><td>
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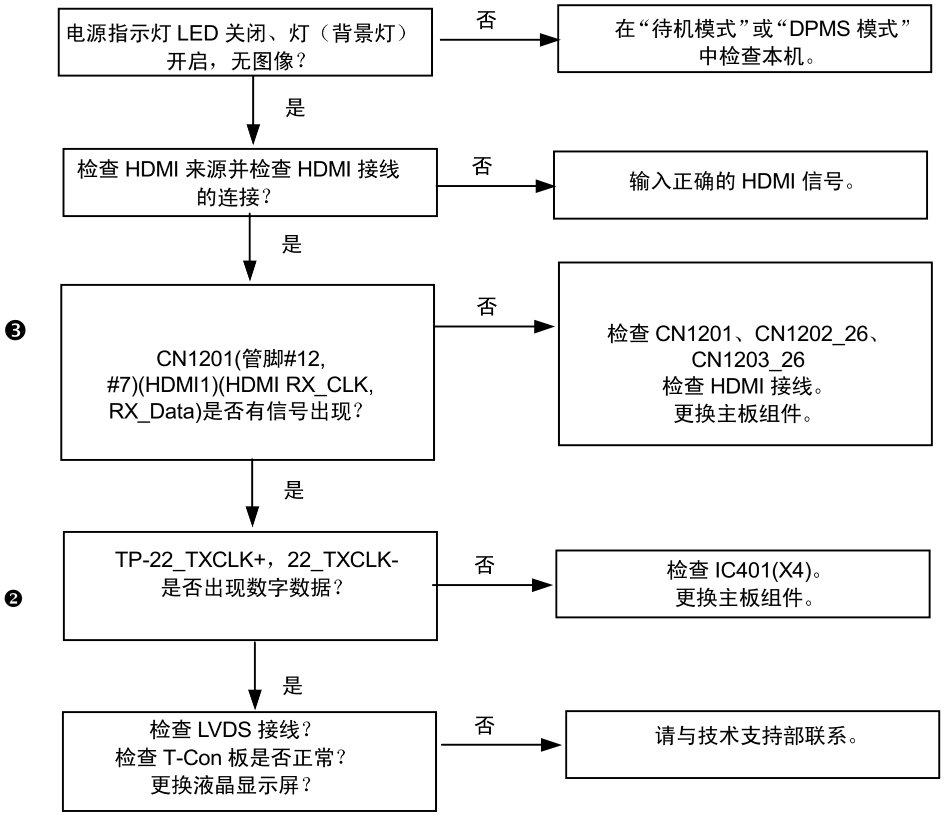
4-1-4.无图像_HDMI1,2-数字信号（X4）

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查HDMI来源
-检查HDMI开关，检查Chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>


</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
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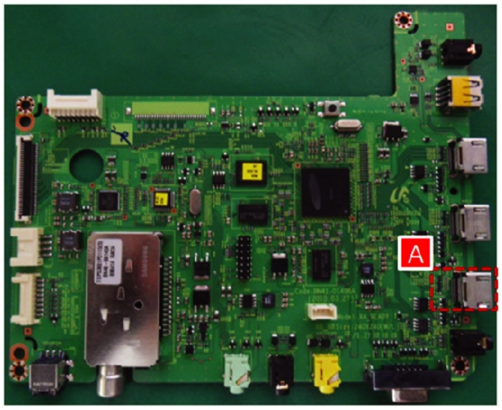
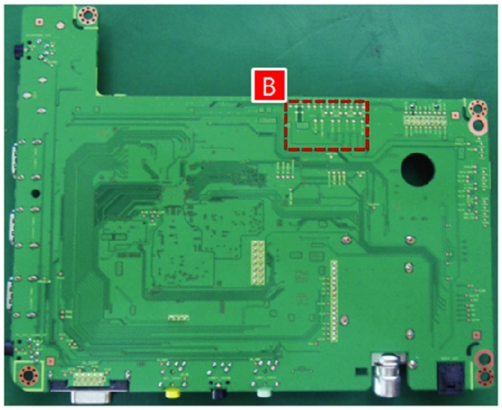
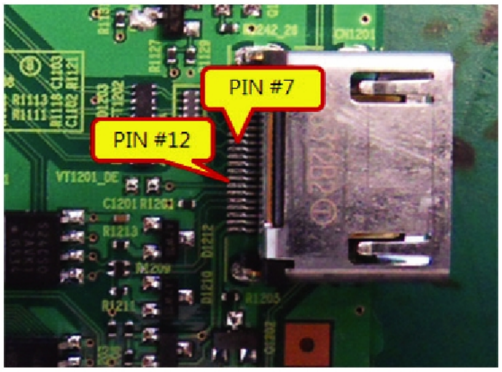
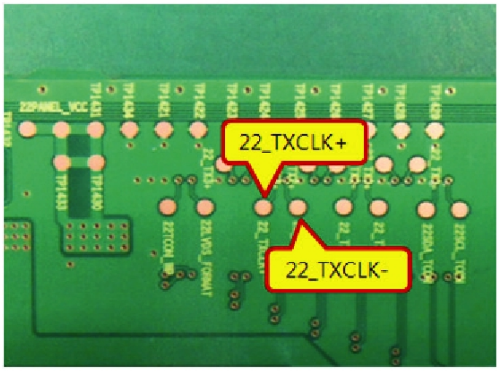
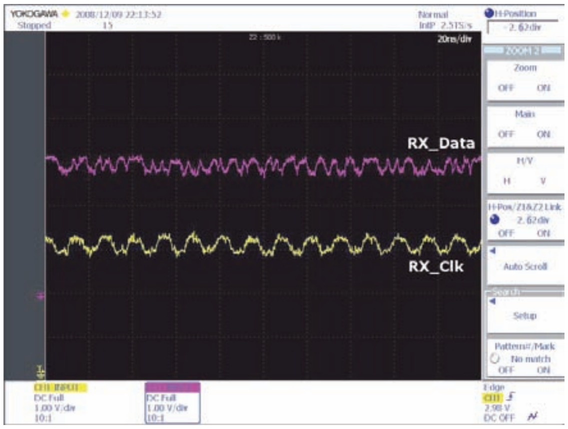
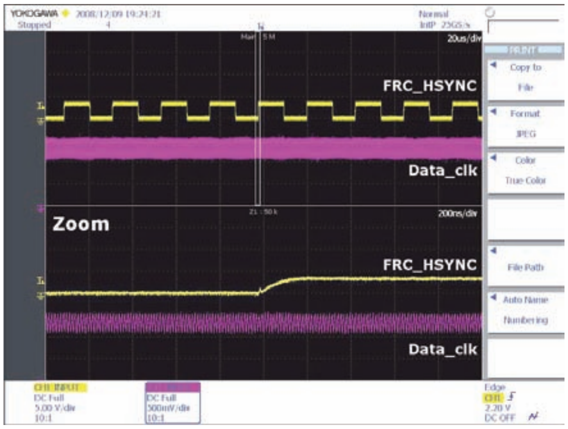
<tr><td>顶部</td><td>
</td><td>底部</td><td>
</td></tr>
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td>
</td><td>B</td><td>
</td></tr>
</table>

波形

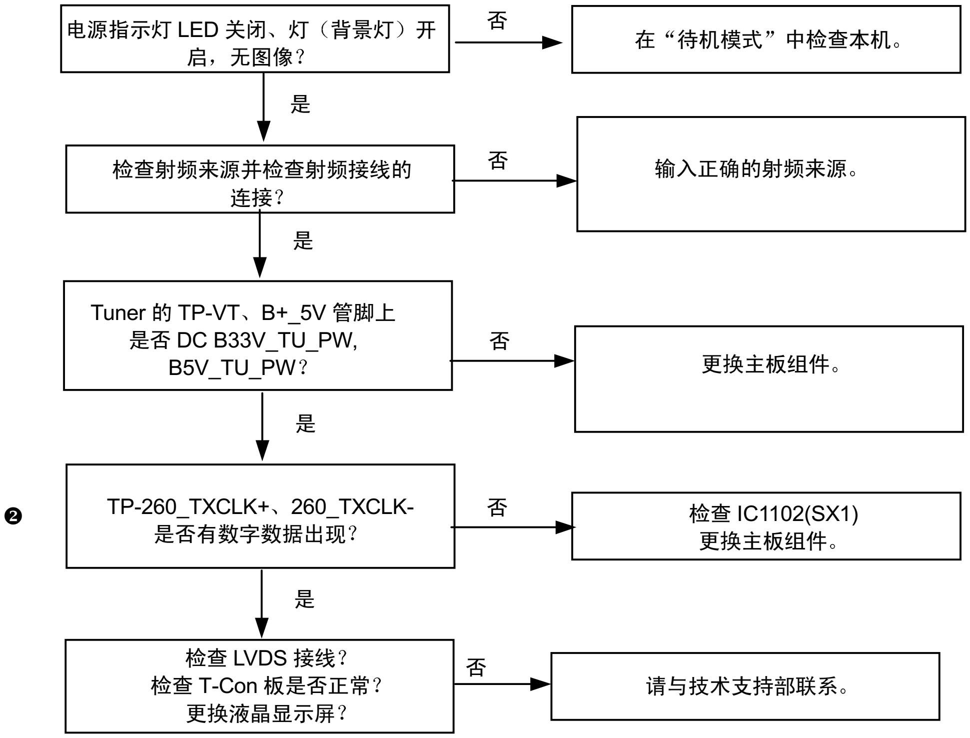
❸	HDMI输入(RX_Data, RX_Clk)

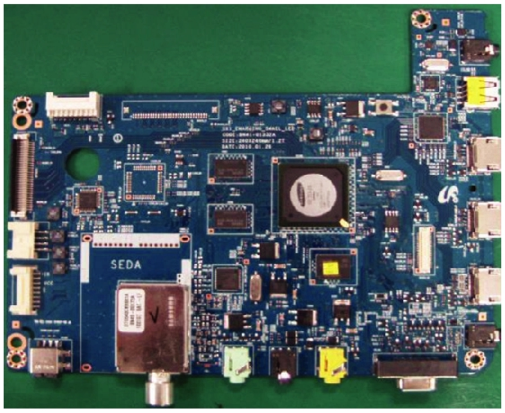
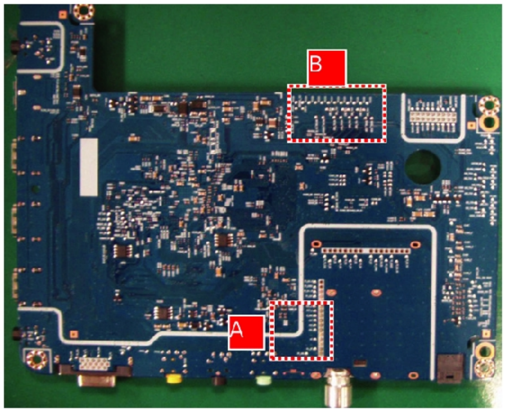
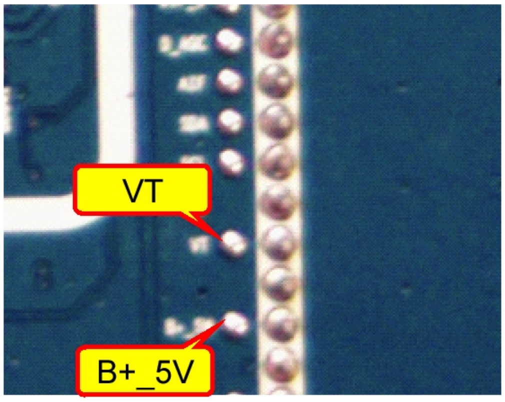
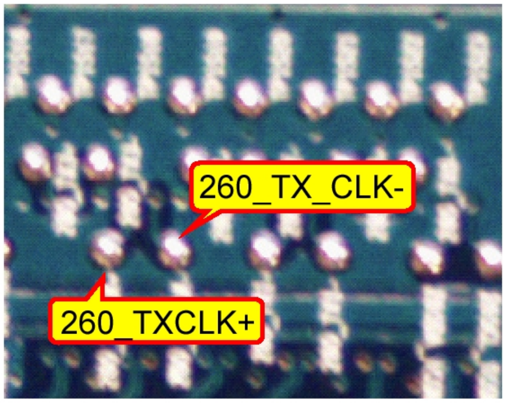


❷	LVDS输出

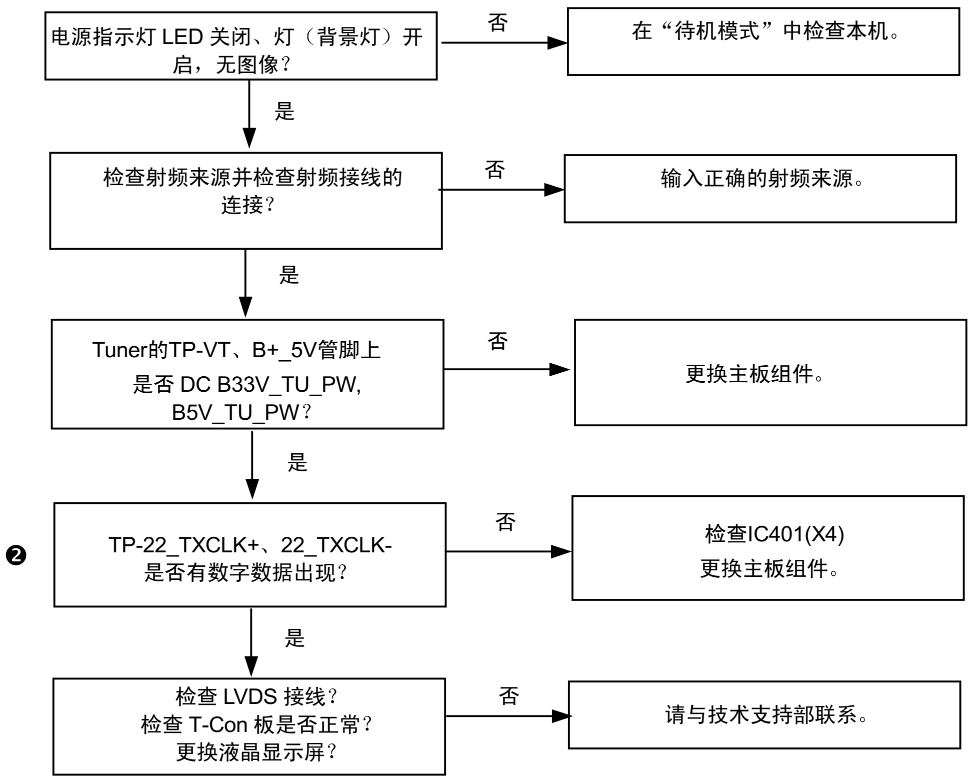


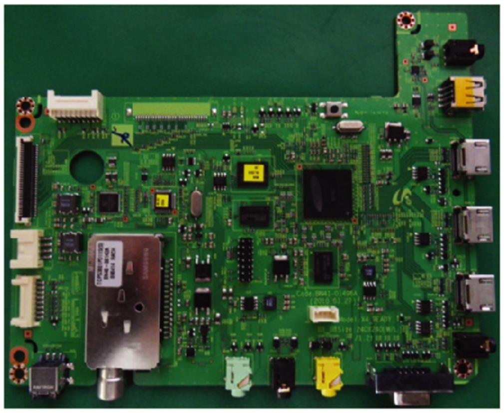
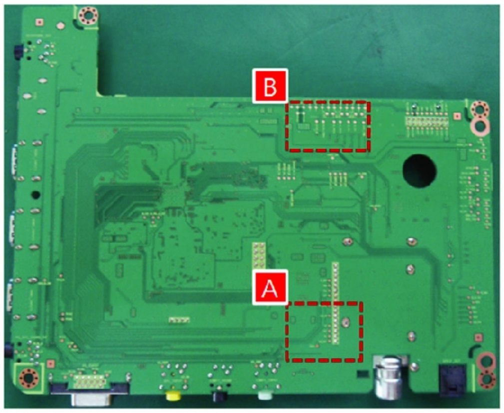
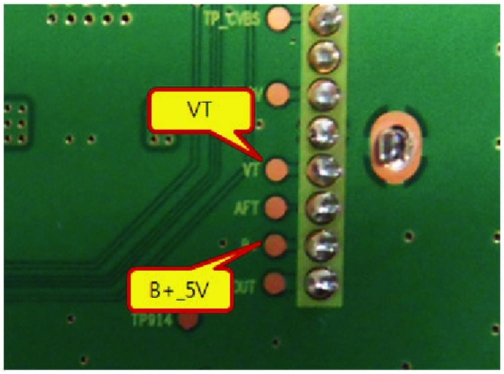
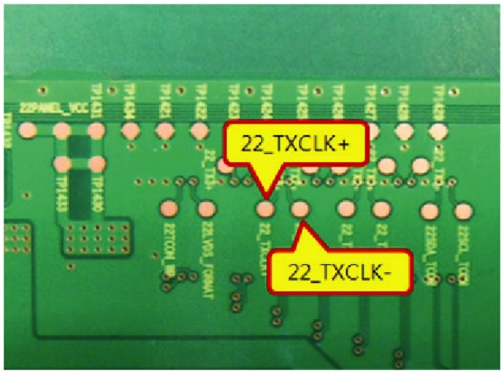
4-1-5.无图像_Tuner_CVBS(SX1)

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查Tuner CVBS来源
-检查Tuner，检查Chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>
</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
</table>

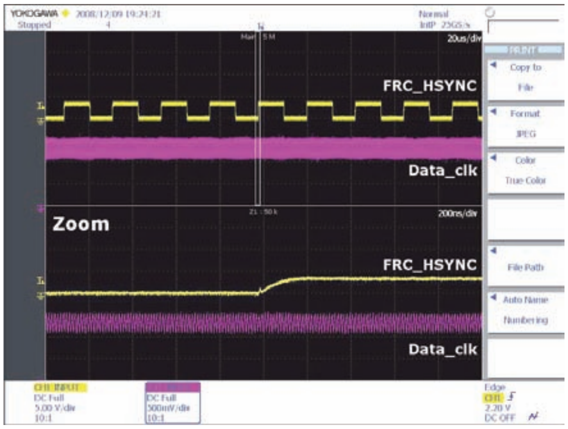
位置（主板）			
顶部		底部	
详情			
A		B	

4-1-5.无图像_Tuner_CVBS(X4)

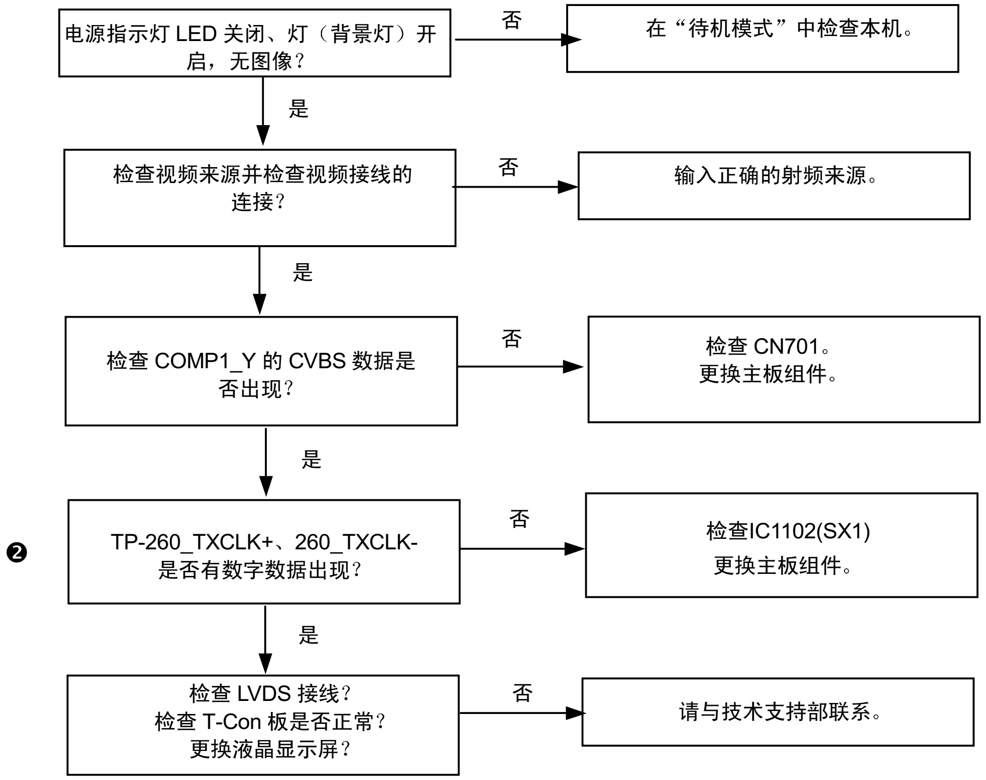
征兆	-声音正常，但屏幕上未显示画面。
主要检查点	-检查Tuner CVBS来源 -检查Tuner，检查Chelsea -当断开连接主板和面板的LVDS接线时，可能出现这种情况。
诊断	
小心	在IP板上工作之前，必须断电。

<table>
<tr><th colspan="4">位置（主板）</th></tr>
<tr><td>顶部</td><td></td><td>底部</td><td></td></tr>
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td></td><td>B</td><td></td></tr>
</table>

波形

❷	LVDS输出
	

4-1-6.无图像_Video_CVBS（SX1）

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查视频来源
-检查Chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>


</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
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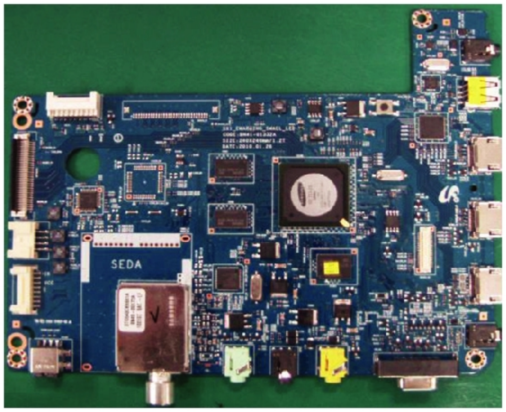
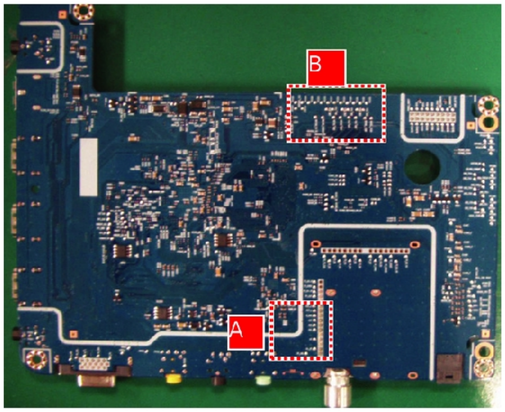
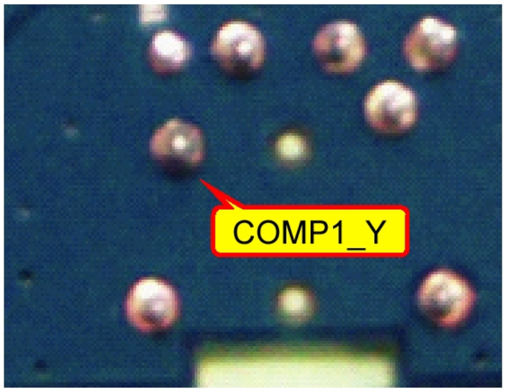
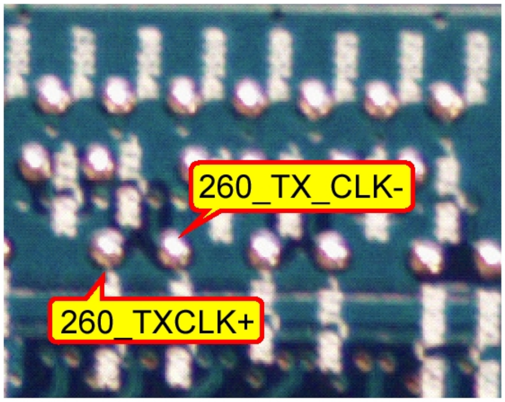
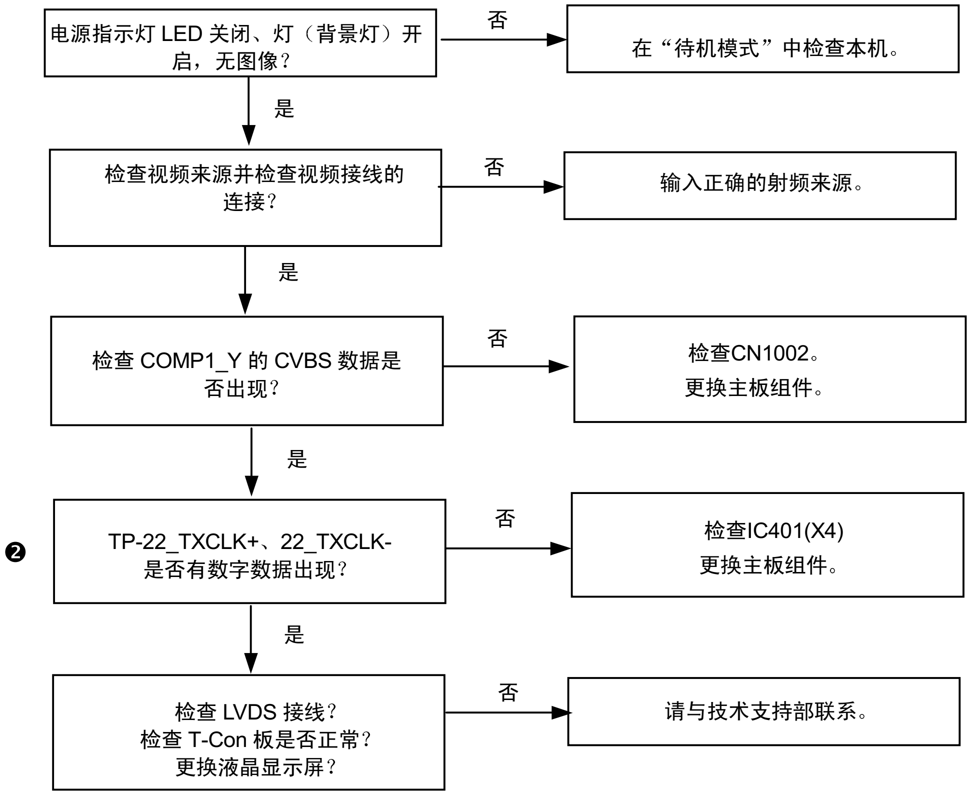
<tr><td>顶部</td><td></td><td>底部</td><td></td></tr>
<tr><th colspan="4">详情</th></tr>
<tr><td>A</td><td></td><td>B</td><td></td></tr>
</table>

4-1-6.无图像_Video_CVBS（X4）

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查视频CVBS来源
-检查Chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>
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<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
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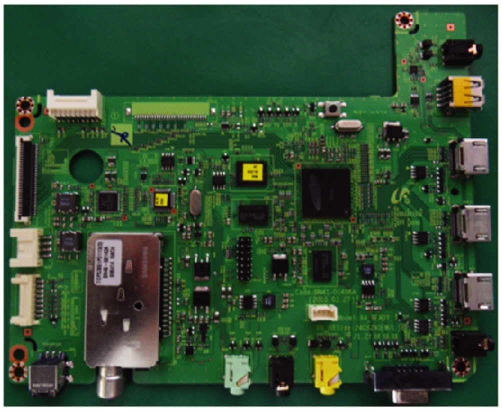
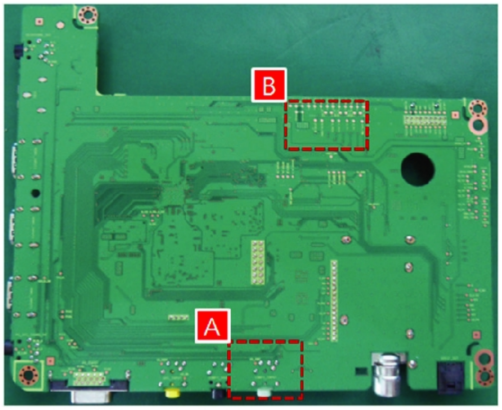
<tr><td>顶部</td><td></td><td>底部</td><td>
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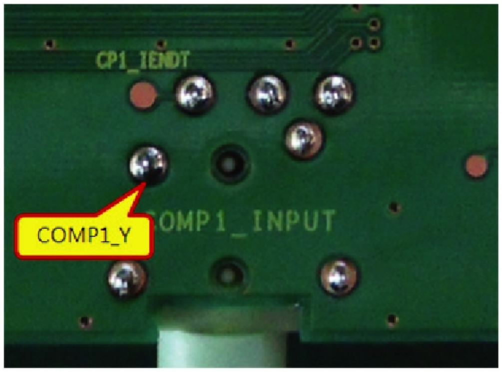
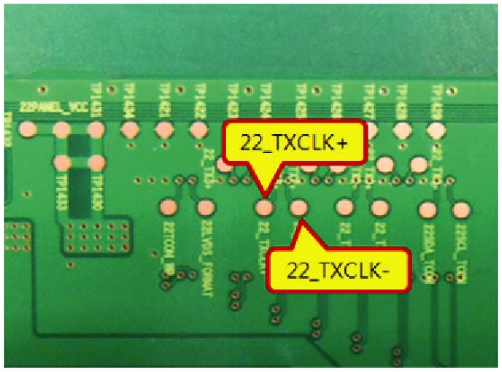
<tr><td colspan="4">详情</td></tr>
<tr><td>A</td><td>
</td><td>B</td><td>
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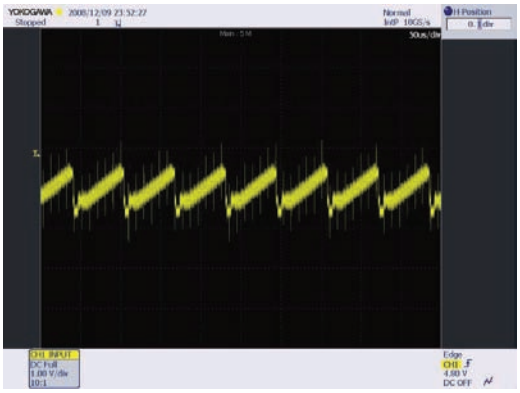
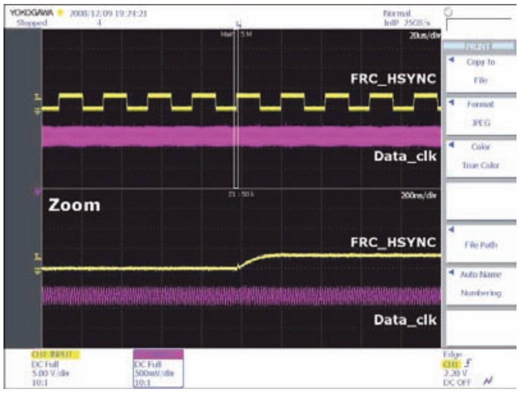
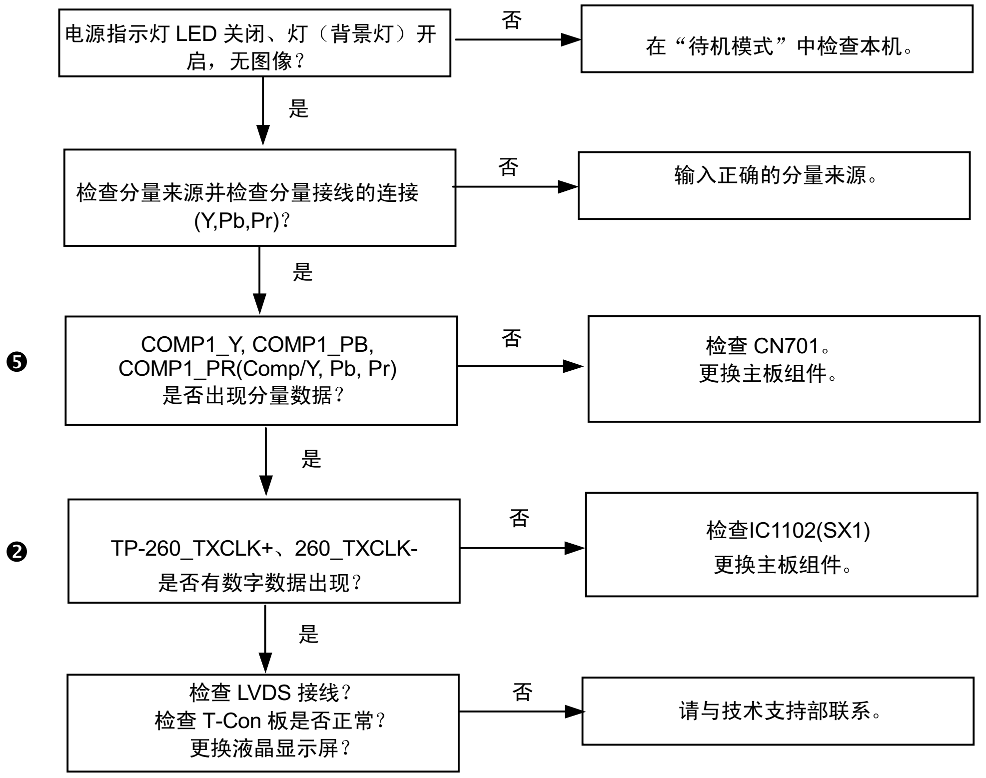
波形

❹	CVBS输出（灰色条）
	
❷	LVDS输出
	

4-1-7.无图像_分量（SX1）

<table>
<tr><td>征兆</td><td>-声音正常，但屏幕上未显示画面。</td></tr>
<tr><td>主要检查点</td><td>-检查分量来源
-检查chelsea
-当断开连接主板和面板的LVDS接线时，可能出现这种情况。</td></tr>
<tr><td>诊断</td><td>


</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
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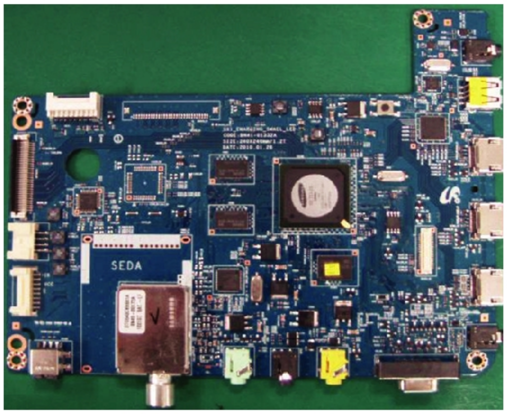
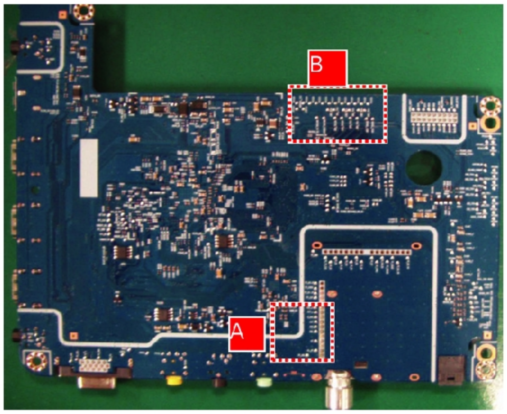
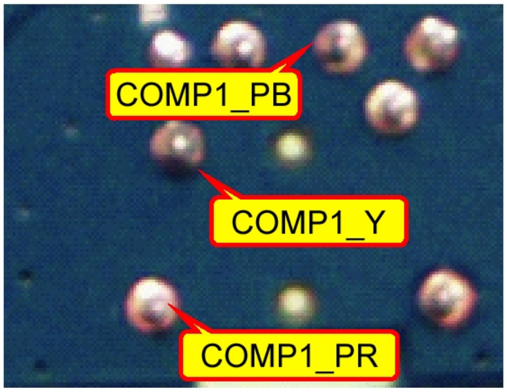
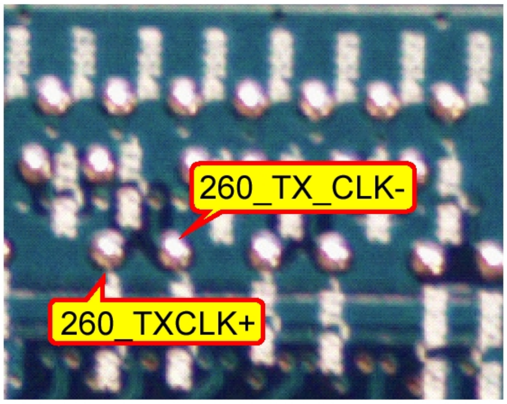
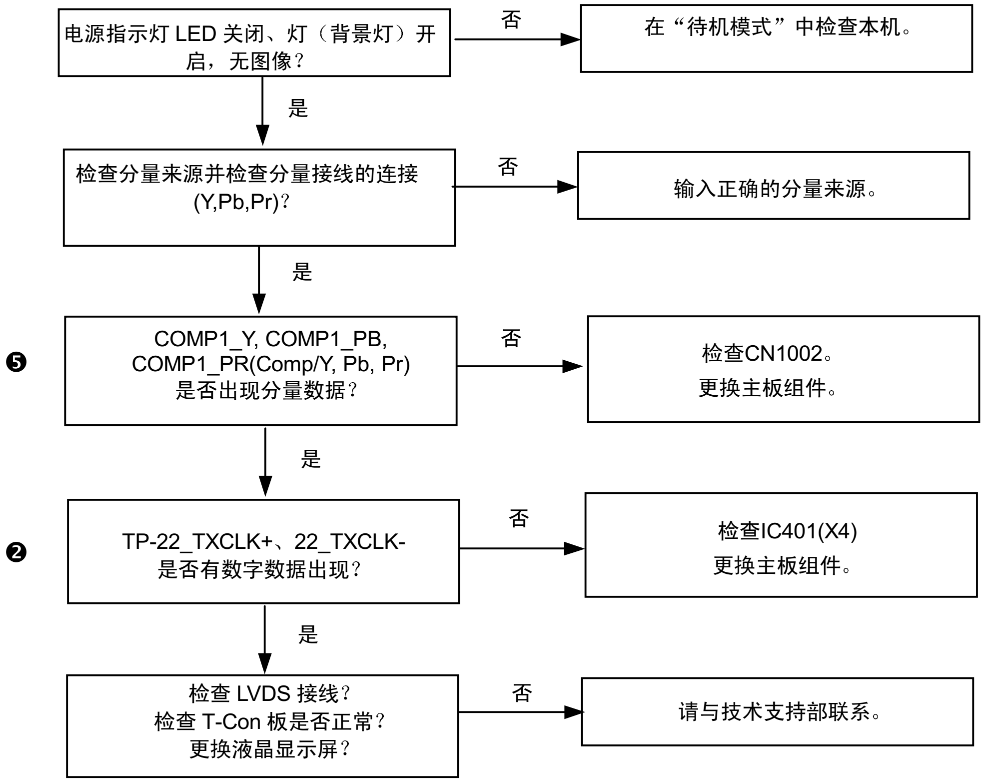
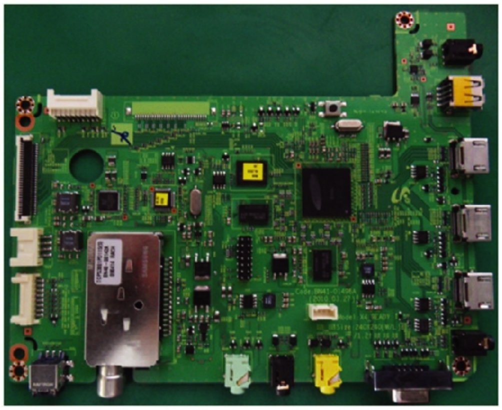
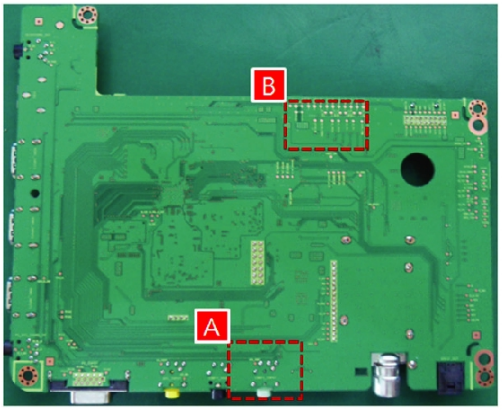
<table>
<tr><th colspan="4">位置（主板）</th></tr>
<tr><td>顶部</td><td></td><td>底部</td><td>
</td></tr>
<tr><td colspan="4">详情</td></tr>
<tr><td>A</td><td>
</td><td>B</td><td>
</td></tr>
</table>

4-1-7.无图像_分量（X4）

征兆	-声音正常，但屏幕上未显示画面。
主要检查点	-检查分量来源 -检查chelsea -当断开连接主板和面板的LVDS接线时，可能出现这种情况。
诊断	
小心	在IP板上工作之前，必须断电。

<table>
<tr><th colspan="4">位置（主板）</th></tr>
<tr><td>顶部</td><td></td><td>底部</td><td>
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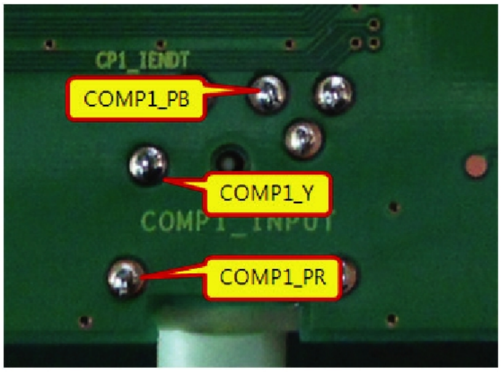
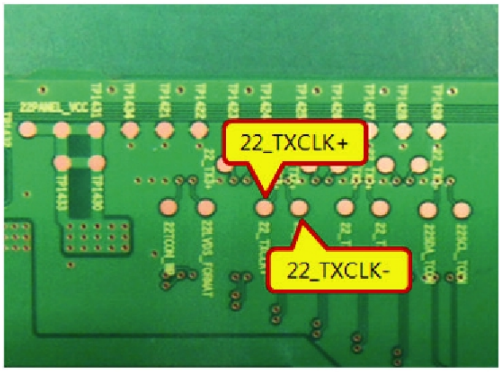
<tr><td>A</td><td>
</td><td>B</td><td>
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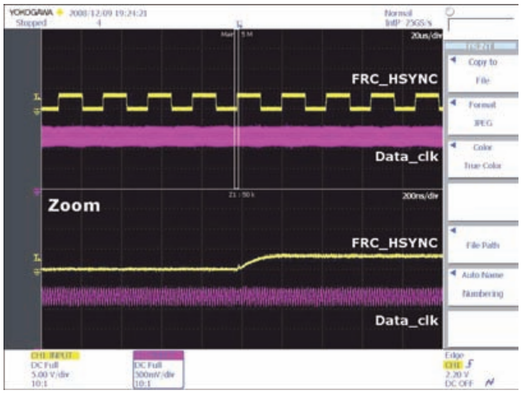
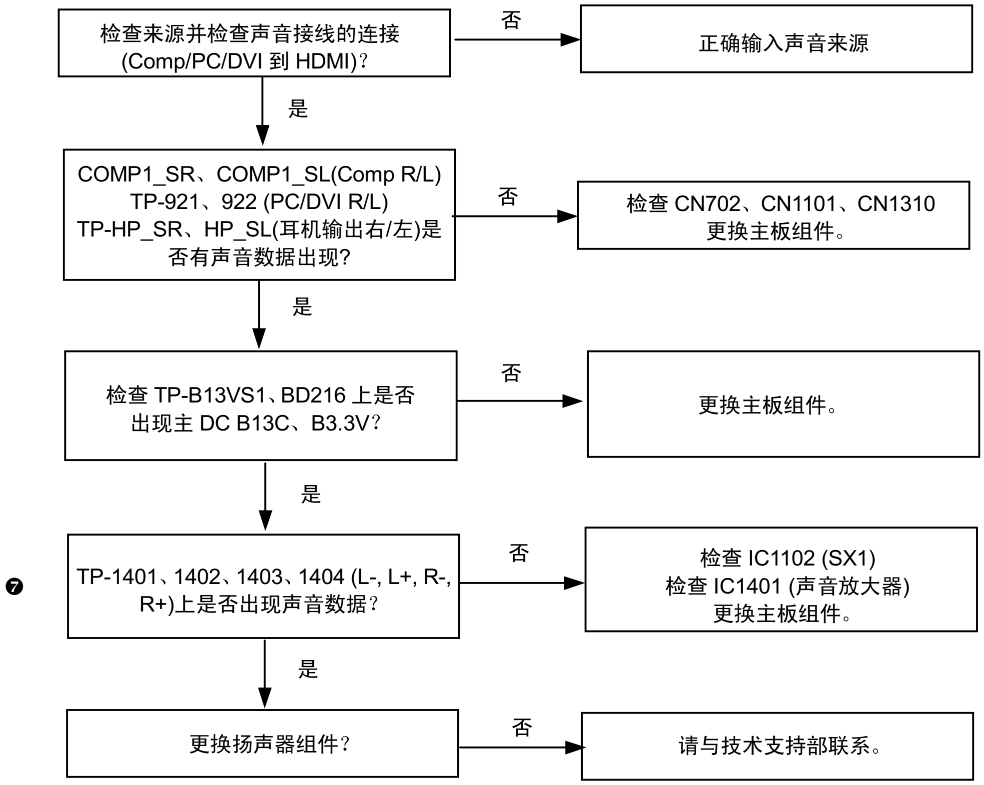
波形

❺	Compnent_Y (灰度级) / Pb / Pr (彩色条)

❷	LVDS输出



4-1-8.没有声音

<table>
<tr><td>征兆</td><td>-图像正常，但没有声音。</td></tr>
<tr><td>主要检查点</td><td>-扬声器连接器被断开或被损坏。
-主板的声音处理部分发生故障。
-扬声器缺陷。</td></tr>
<tr><td>诊断</td><td>


</td></tr>
<tr><td>小心</td><td>在IP板上工作之前，必须断电。</td></tr>
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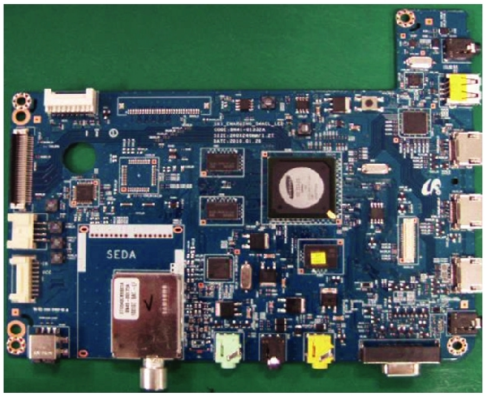
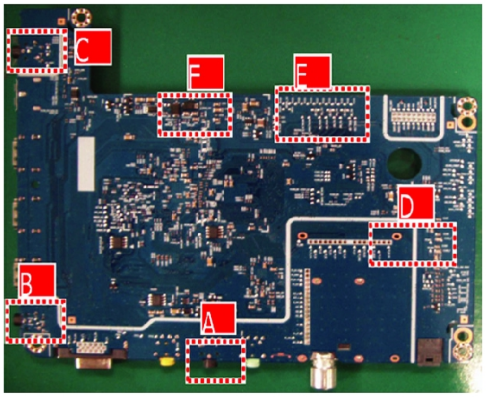
<tr><td>顶部</td><td></td><td>底部</td><td>
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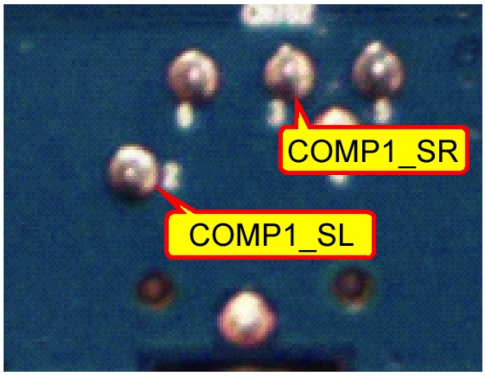
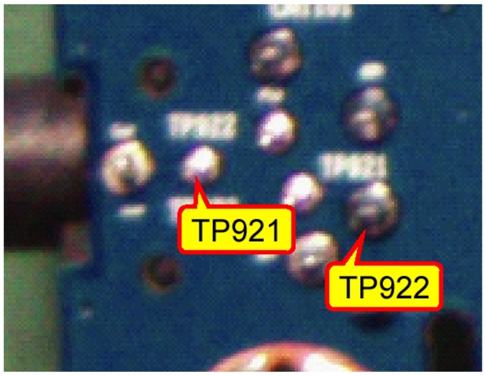
<tr><td>A</td><td>
</td><td>B</td><td>
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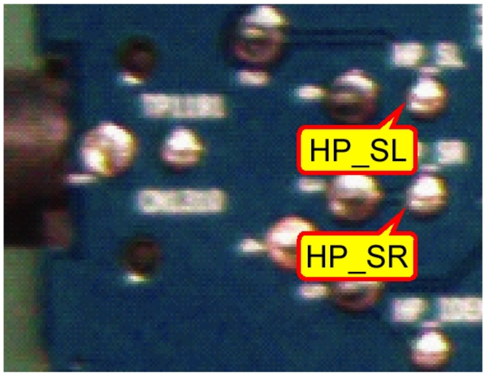
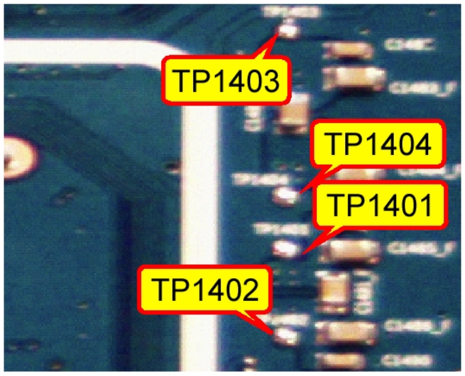
<tr><td>B</td><td>
</td><td>B</td><td>
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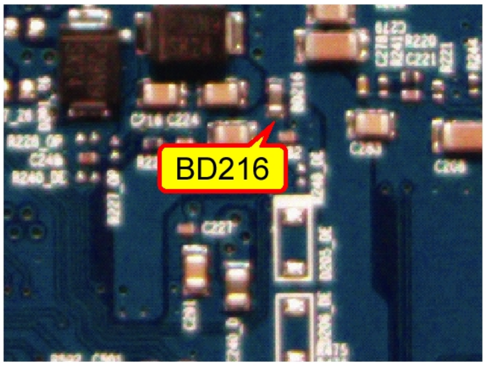
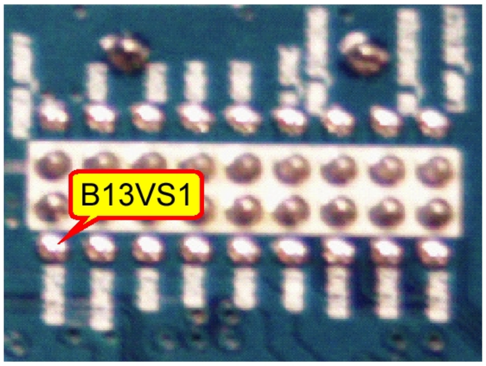
<tr><td>B</td><td>
</td><td>B</td><td>
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4-1-8.没有声音（X4）

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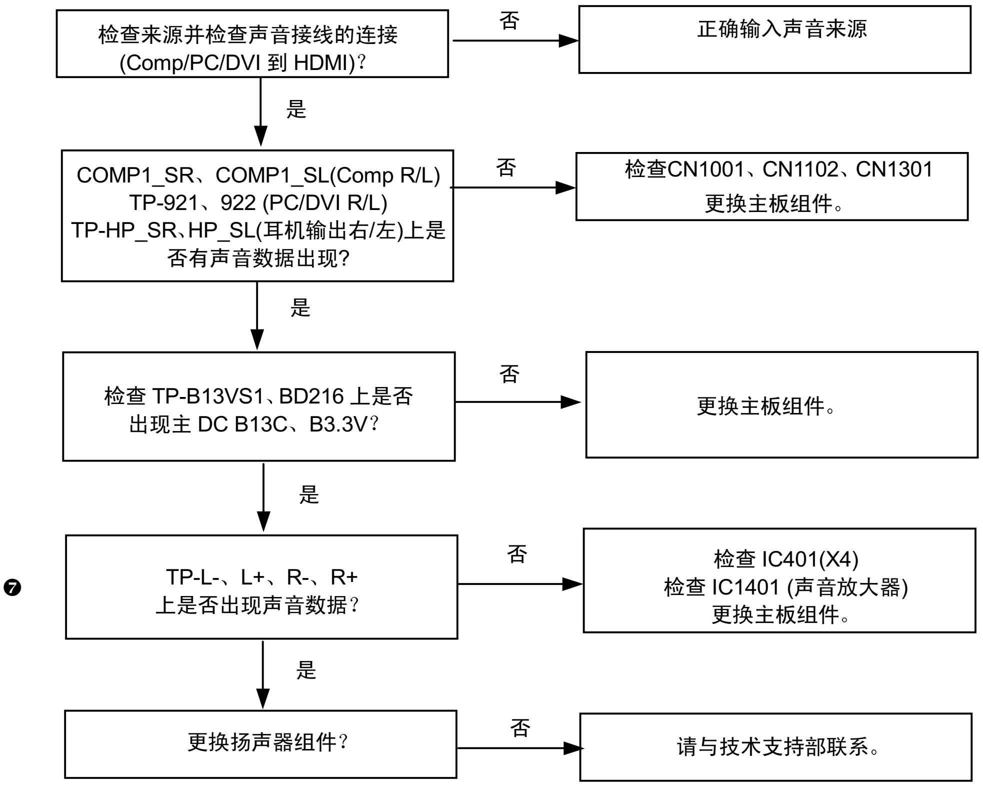
<tr><td>诊断</td><td>
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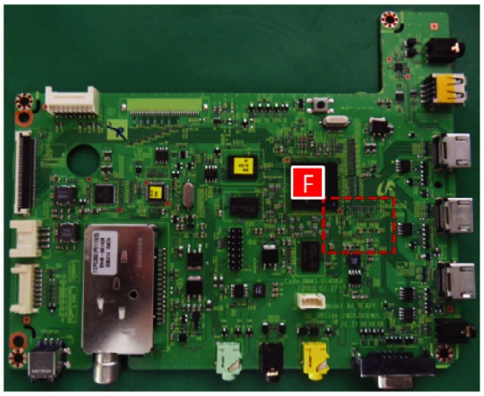
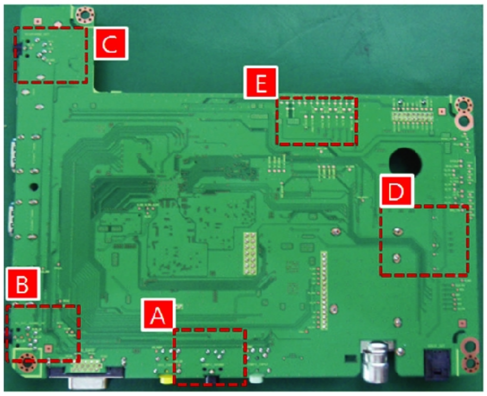
<tr><td>顶部</td><td>
</td><td>底部</td><td>
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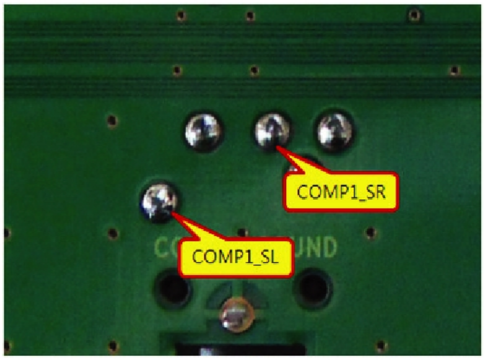
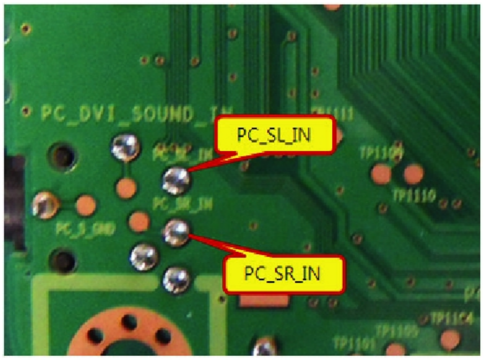
<tr><td>A</td><td>
</td><td>B</td><td>
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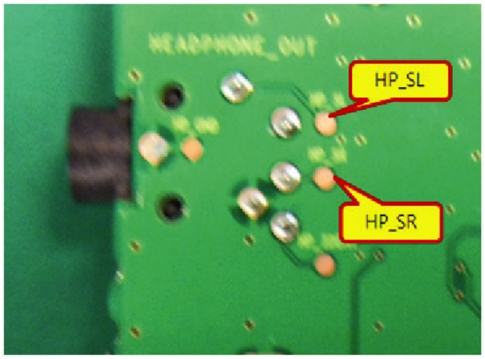
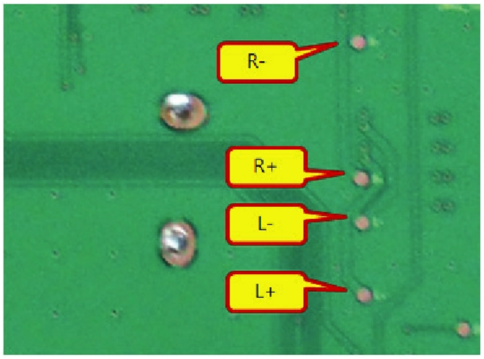
<tr><td>C</td><td>
</td><td>D</td><td>
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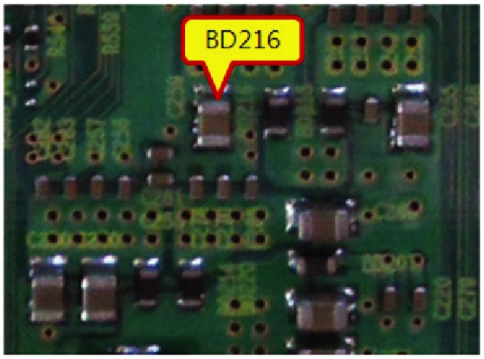
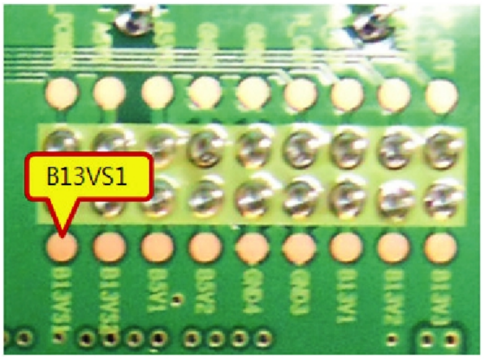
<tr><td>F</td><td>
</td><td>E</td><td>
</td></tr>
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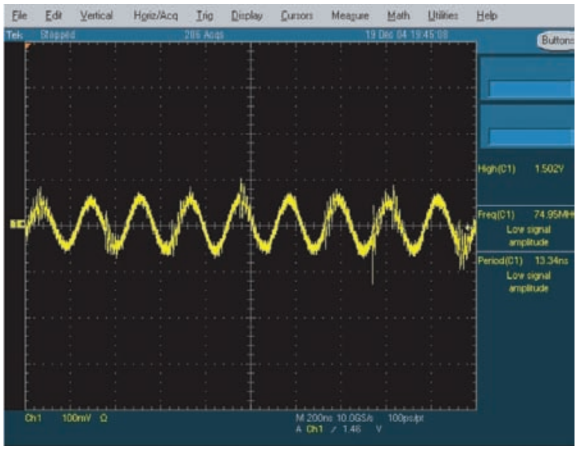
波形

❼	扬声器输出
 File Edit Vertical Horiz/Acq Trig Display Cursors Measure Math Utilities Help Tek Stopped 19 Dec 04 19:45:08 Buttons High(C1) 1.502V Freq(C1) 74.95MH Low signal amplitude Period(C1) 13.34ns Low signal amplitude Ch1 100mV Ω M 200ns 10.0GS/s 100ps/pt A Ch1 / 1.46 V	

4-2.调整和调节

4-2-1 一般维修说明

1.通常，彩色液晶电视只需在安装时稍加调节。检查基本特性，如高度、水平和竖直同步。

2.使用规定的测试设备或等效品。

3.需要正确的匹配阻抗。

4.避免过载。扫描振荡器发出的过多信号可能使电视的前端过载。当插入标志信号时，不可使标志信号发生器干扰测试结果。

5.只可把电视连接到具有后盖铭牌上标定的电压和频率的交流电源上。

6.当电视机处于开机状态时，不可试图连接或断开接线。必须保证在更换任何零件时拔下电源线。

7.为了防止电击危险，应使用隔离变压器。

4-3.工厂模式调节

4-3-1 进入工厂模式

如欲进入“维修模式”，可按下列顺序按下遥控键：

-如果没有工厂遥控器

信息 → 菜单 → 静音 → 开机

4-3-2 如何进入维修模式

使用客户遥控

1. 关机并设置为待机模式。
2. 按此顺序按下遥控按钮开机。
3. 开机并进入到维修模式，这可能需要耗费大约20秒的时间。
4. 按下电源按钮退出并存储数据到存储器中。
   - 如果进入维修模式失败，重复上述步骤1和步骤2。
5. 初始化“维修模式显示”状态

SX1	X4
Option	**Option**
Control	Control
SVC	SVC
Expert	Expert
ADC/WB	ADC/WB
Advanced	Advanced
T-TDT5DAAC-XXX T-TDT5DAAC-XXX EDID SUCCESS CALIB : AV X COM X PC X HDMI X Option : XXXX XXXX XXXX X SDAL-XXX RFS : 0130 T-TDT5DAAC 20XX-XX-XX TYPE : XX MODEL : XXXXX MAC FAIL FACTORY DATA VER : XXX EERC VERSION : XXX DTP-AP-COMP-310-01 DTP-HIIG-0304 DTP-BP-0314 DATE OF PURCHASE : XX/XX/XX	T-MSX5DAAC-XXXX T-MSX5DAAS-XXXX EDID SUCCESS CALIB : AV X COMP X PC X HDMI X Option : XXXX XXXX XXXX T-CHELENCIP-1002 SDAL-XXXXX RFS : XXXX 20XX-XX-XX TYPE : XXXXXXXX MODEL : XXXXXXXXX MAC Not available LOCK X FACTORY DATA VER : XXX DTC-AP-COMP-419-0002 DTC-HIIG-0421-02 DTC-BP-0422-02 DATE OF PURCHASE : XX/XX/XX

* 如何进入到隐性工厂模式。

a. 进入到工厂模式

b. 移动箭头选择“高级”

c. 按键输入：0 + 0 + 0 + 0

** 隐藏菜单：高级

6. 在维修模式中的按钮操作

菜单	全部菜单显示/移动到主体菜单
方向键▲/▼	通过移动鼠标选择项目
方向键◀/▶	所选项目增加/减少
来源	通过激活输入源，连接到本机，进行循环。

4-3-3 工厂数据

■ 选项

OPTION	Factory Name	Data	Range
	Factory Reset		
	Type		NONE/19O6TH0C/19A6TH0C/22I6TH0C/22A6TH0C/22D6TH0C/22P6TH0C/26A6AH0C/26D6AH0C/26L6AH0C/26P6AH0C/32A6AH0C32D6AH0C/32L6AH0C32P6AH0C/32A6AF0C/32L6AF0C/32A1AF0C/32L1AF0C/37L6AF0C/37L1AF0C/40A6AF0C/40D6AF0C/40L6AF0C/40A1AF0C/40L1AF0C/40A1UF0C/40D1UF0C/40L1UF0C/46A6AF0C/46D6AF0C/46L6AF0C/46A1AF0C/46L1AF0C/46A1UF0C/46D1UF0C/46L1UF0C/55A1UF0C/55L1UF0C/65L1UF0C/19R6TH0E/22D6TH0E/26D6AH0E/32D6AH0E32D6UF0E/32A1UF0E/32D1UF0E/37L6UF0E/37D1UF0E/37L1UF0E/40D6UF0E/40A1UF0E/40D1UF0E/46D6UF0E/46L6UF0E/46A1UF0E/46D1UF0E/46L1UF0E/55A1UF0E/55D1UF0E/55L1UF0E/65L1UF0E/42HHcD3/50HHcD450FArN4/50FArV458FArN1/58FArV163FArN1/
	Local Set	…	
	Model	LC550 LC540 LC530 LC450	LC350/LC450/LC450H/LC451LC452/LC457HLC459H/LC480/LC530/LC530H/LC539H/LC540/LC550/LC560/LC580/LC570/LC610/LC620/LC630/LC631/LC632/LC633/LC640/LC650/LC652/LC653/LC654/LC670/ UC400/UC400H/UC4010/UC5000/UC5100/UC6000/UC6200/UC6300/UC6400/UC6400H/UC6500/UC6510/UC6530/UC6540/UC6550/UC6600/UC6620/UC6630/UC6700/UC6720/UC6730/UC6740/UC6800/UC6830/UC6900/UC6900H/UC8000/ PC420/PC430/PC431/PC432/PC450/PC451/PC480/PC520/PC530/PC531/PC540/PC541/PC550/PC551/PC560/PC580/PC590/PC670/PC6100/PC6400/PC6500/PC7000/PC7700/PC8000
	TUNER	DRX3900J	
	DDR	0	
	Country	USA	
	Front Color		NONE/W-MILKY/T-M-Brn/T-W-Brn/T-W-Gray/W-D-Gray/W-M-Whit/W-Violet/T-C-Gray/T-R-BLK/S-BLK/S-RBLK/S-C-Gray/

■ 控制

Control	Factory Name
	EDID
	Sub Option
	PDP Option
	Hotel Option
	Shop Option
	Asia Option
	Sound
	Config Option
	SCC

EDID	Factory Name	Data	Range
	EDID ON/OFF	Off	
	EDID WRITE ALL	…	
	EDID WRITE PC	…	
	EDID WRITE HDMI	…	
	EDID WRITE HDMI1	…	
	EDID WRITE HDMI2	…	
	EDID WRITE HDMI3	…	
	EDID WRITE HDMI4	…	
	EDID 1.2 PORT	…	
	EDID WRITE DVI	…	

Sub Option

Factory Name	Data	Range
RF Mute Time	600ms	0ms~1000ms
RS-232 Jack	UART	Debug/Login/UART
Watchdog	OFF	ON/OFF
WD Count	0	255
Dimm Type	EXT	fixed
Lvds Format	JEIDA	JEIDA/VESA/19INCH
MediaPlay DB	On whth 5MB	fixed
MediaPlay Movie	chapterinMedia	fixed
MediaPlay DLNA	OFF	fixed
MediaPlay PlayList	OFF	fixed
OTN Server Type	operationg	operation/development
OTN Test Server	OFF	OFF/ A/B/C/D/E Zone
OTN Support	ON	ON/OFF
OTN Reset		not modifyed
OTN Duration	OFF	ON/OFF
OTN Fail Test	OFF	ON/OFF
T-CON USB Download	Failure	fixed
View Log		not modifyed
SST		not modifyed
2nd mips	ON	ON/OFF
2nd mips count	0	0~255
Region	USA	fixed
PC Auto Ident	Enable	Auto/Enable

Hotel Option

Factory Name	Data	Range
Hotel Mode	OFF	
SI Vender	…	
Power On Channel	…	
Channel Type	…	
Power On Volume	…	
Min Volume	…	
Max Volume	…	
Panel Button Lock	…	
Power On Source	…	

Shop Option

Factory Name	Data	Range
Shop Mode	OFF	ON/OFF
Exhibition Mode	OFF	ON/OFF

Sound	Factory Name	Data	Range
	High Devi	OFF	ON/OFF
	Carrier_Mute	ON	ON/OFF
	Speaker Delay Normal	10	0~255
	Pilot Level High Thld	0x70h	0x00~0xff
	Pilot Level Low Thld	0x20h	0x00~0xff
	Speaker EQ	ON	ON/OFF
	SPDIF PCM Gain	-9dB	-10dB~0dB

■ SVC

SVC	Factory Name	Data	Range
	Test Pattern		fixed
	Panel Display Time	0Hr	
	Tuner Status		

Test Pattern	Factory Name	Data	Range
	Pattern Sel	OFF	OFF/ White/Grey/Black/Red/Green/Blue
	RFC PC Mode	OFF	ON/OFF
	Logic Pattern Sel	…	Not modified
	Logic Level Sel	…	Not modified

TUNER STATUS	Factory Name	Data	Range
	DVB		
	ISDB-T		

DVB

Factory Name	Data	Range
SNR		Not modified
BER		Not modified
Singal Strength		Not modified
Bandwidth		Not modified
Frequency		Not modified
LNA Status		Not modified
FFT		Not modified
Modulation		Not modified
Code Rate		Not modified
GI		Not modified
Hier Modulation		Not modified
Frequency Offset		Not modified
Timing Offset		Not modified
AGC		Not modified
UCB		Not modified
PLL Type		Not modified
DEMOD Type		Not modified
TPS LOCK		Not modified
RS Lock		Not modified
SSI		Not modified
SQI		Not modified

ISDB-T

Factory Name	Data	Range
FFT Size_1		Not modified
Guard Interval_1		Not modified
Freq. Offset_1		Not modified
SNR_1		Not modified
IF AGC_1		Not modified
TMCC Lock_1		Not modified
TS Packet_1		Not modified
Master Lock_1		Not modified
A_Modulation_1		Not modified
A_Code Rate_1		Not modified
A_Timer InterLeave_1		Not modified
A_Segments Num_1		Not modified
A_Ber_1		Not modified
B_Modulation_!		Not modified
B_Code Rate_1		Not modified
B_Timer InterLeave_1		Not modified
B_Segments Num_1		Not modified
B_BER_1		Not modified
C_Modulation_1		Not modified
C_Code Rate_1		Not modified
C_Timer InterLeave_1		Not modified
C_Segments Num_1		Not modified
C_BER_1		Not modified

■ Expert

Expert	Factory Name	Data	Range
	N / D ADJ	Off	Off / On / FIX
	SOURCE	...	Not modified

■ ADC/白平衡

ADC/WB	Factory Name
	ADC
	ADC Target
	ADC RESULT
	WB

ADC	Factory Name	Data	Range
	AV Calibration	Success	Success / Failure
	Comp Calibration	Success	Success / Failure
	PC Calibration	Success	Success / Failure
	HDMI Calibration	Success	Success / Failure

ADC Target	Factory Name	Data	Range
	1st_AV_Low	18	0 ~ 255
	1st_AV_High	220	0 ~ 255
	1st_AV_Delta	1	0 ~ 255
	1st_COMP_Low	16	0 ~ 255
	1st_COMP_High	235	0 ~ 255
	1st_COMP_Delta	1	0 ~ 255
	1st_PC_Low	2	0 ~ 255
	1st_PC_High	235	0 ~ 255
	1st_PC_Delta	1	0 ~ 255
	2nd_Low	1	0 ~ 255
	2nd_High	235	0 ~ 255
	2nd_Delta	1	0 ~ 255

ADC RESULT

Factory Name	Data	Range
1st_AV_Gain	127	0 ~ 255
1st_AV_Offset	139	0 ~ 255
1st_Comp_Gain	68	0 ~ 255
1st_Comp_Gain_Cb	68	0 ~ 255
1st_Comp_Gain_Cr	68	0 ~ 255
1st_Comp_Offset	127	0 ~ 255
1st_Comp_Offset_Cb	127	0 ~ 255
1st_Comp_Offset_Cr	127	0 ~ 255
1st_PC_R_Gain	96	0 ~ 255
1st_PC_G_Gain	95	0 ~ 255
1st_PC_B_Gain	94	0 ~ 255
1st_PC_R_Offset	127	0 ~ 255
1st_PC_G_Offset	127	0 ~ 255
1st_PC_B_Offset	127	0 ~ 255
2nd_R_Offset	110	0 ~ 255
2nd_G_Offset	110	0 ~ 255
2nd_B_Offset	110	0 ~ 255
2nd_R_Gain	165	0 ~ 255
2nd_G_Gain	165	0 ~ 255
2nd_B_Gain	165	0 ~ 255

WB

Factory Name	Data	Range
Sub Brightness	128	0 ~ 255
R_Offset	128	0 ~ 255
G_Offset	128	0 ~ 255
B_Offset	128	0 ~ 255
Sub Contrast	128	0 ~ 255
R_Gain	128	0 ~ 255
G_Gain	128	0 ~ 255
B_Gain	128	0 ~ 255
Movie R Offset	122	0 ~ 255
Movie B Offset	145	0 ~ 255
Movie R Gain	156	0 ~ 255
Movie B Gain	39	0 ~ 255

4-4.白平衡-校准

4-4-1 白平衡-校准

1.校准	→	AV 校准 Comp校准 PC 校准 HDMI 校准

4-4-2 白平衡-调节

		（弱光）	（强光）
3.白平衡	→	次亮度 红色偏移 绿色偏移 蓝色偏移	次对比度 红色增益 绿色增益 蓝色增益

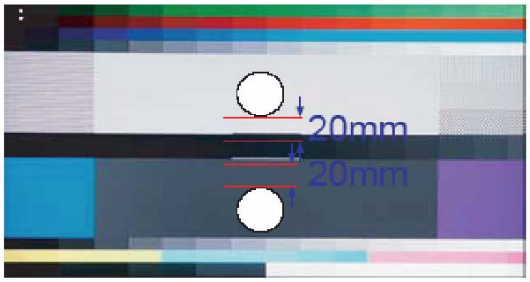
（白平衡调节状况，请参照下页）

4-5. 白色比（平衡）调节

1. 可以在工厂模式下调节白色比（1：校准，3：白平衡）。
2. 因为调节值和数据值随输入源而异，所以必须在 CVBS、分量 1 和 HDMI1 模式下调节。
3. 在默认设置下配置各模式的最佳值。（参照表 1、2）

该项随显示屏尺寸和规格而异。

-设备：CS-210
-图案：MIK K-7256 #92 “平白平衡图”， 作为标准
-只有当与主设备的结果比较结果后，才可使用其他设备
-设置老化时间：60 分钟



-白平衡调节的校准和手动设置

HDMI：#24 方格图校准→用#92 图手动调节（720p）
COMP：#24 方格图校准→用#92 图手动调节（720p）
CVBS：#24 方格图校准→用#92 图手动调节（NTSC）

-如果在 HDMI 模式下完成，调节座标几乎与 AV/COMP 模式下相同。
-白平衡手动调节

4-6.维修信息

4-6-1USB 下载方法

软件升级可通过广播信号或从samsung.com三星网站上下载新固件版本到USB存储设备。
当前的软件版本已被安装到电视中。

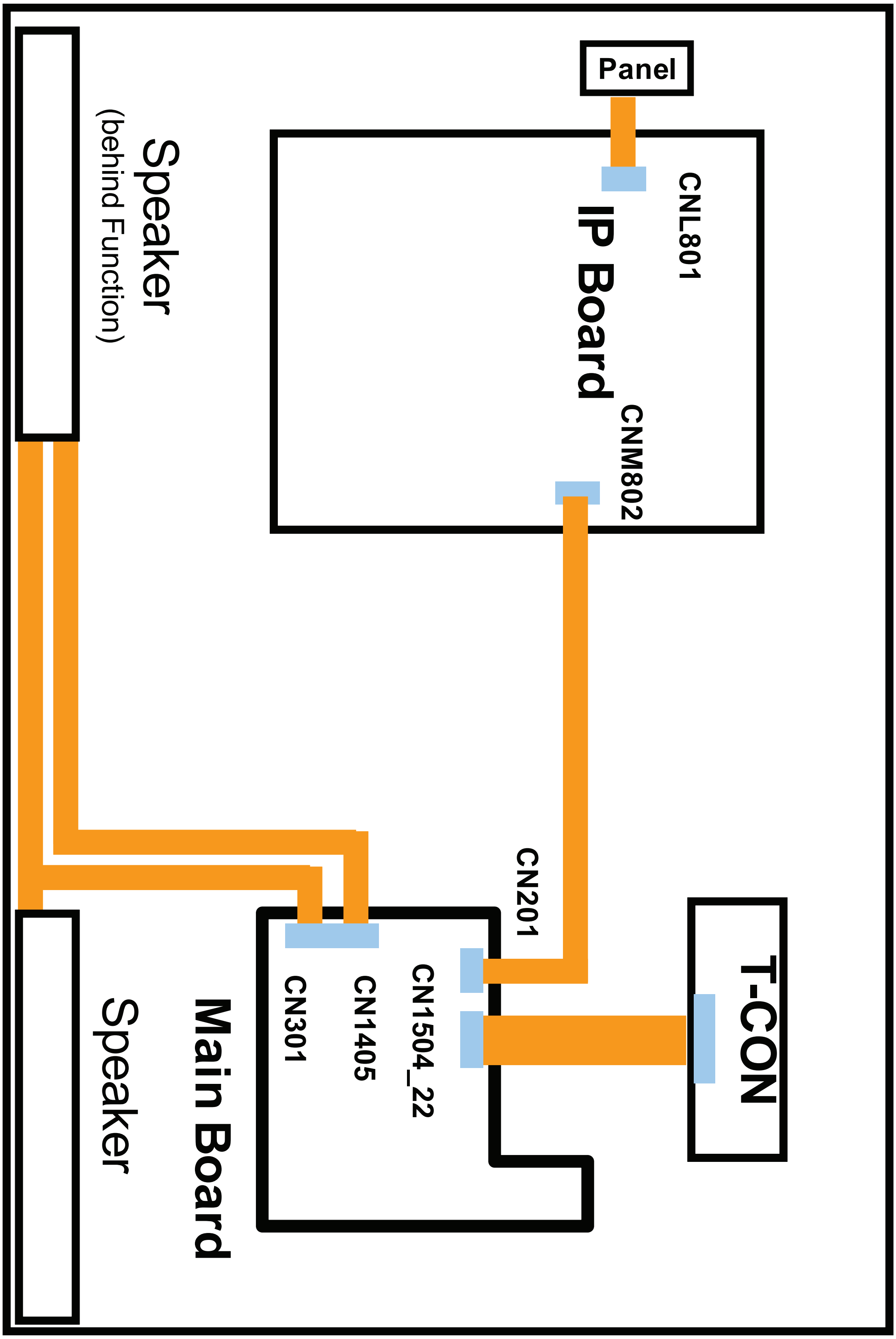
备注：软件上标注有“年/月/日-版本”，建议安装最新的版本。

- 通过USB：插入从samsung.com三星网站中下载包含固件升级文件的USB驱动器到电视中。在升级未完成前，要小心不要断开电源或将USB驱动取下。在完成固件升级后，电视将会自动关闭和开启。当软件升级后，要对视频和音频进行设置返回到默认设置值。我们建议您记下设置值，那样在升级完成后可很容易的进行复位操作。
- 可选软件(备份)：如果新固件发生故障并影响到操作，您可更改软件到之前的版本。
  备注：如果软件发生变更，当前的软件版本将会显示出来。

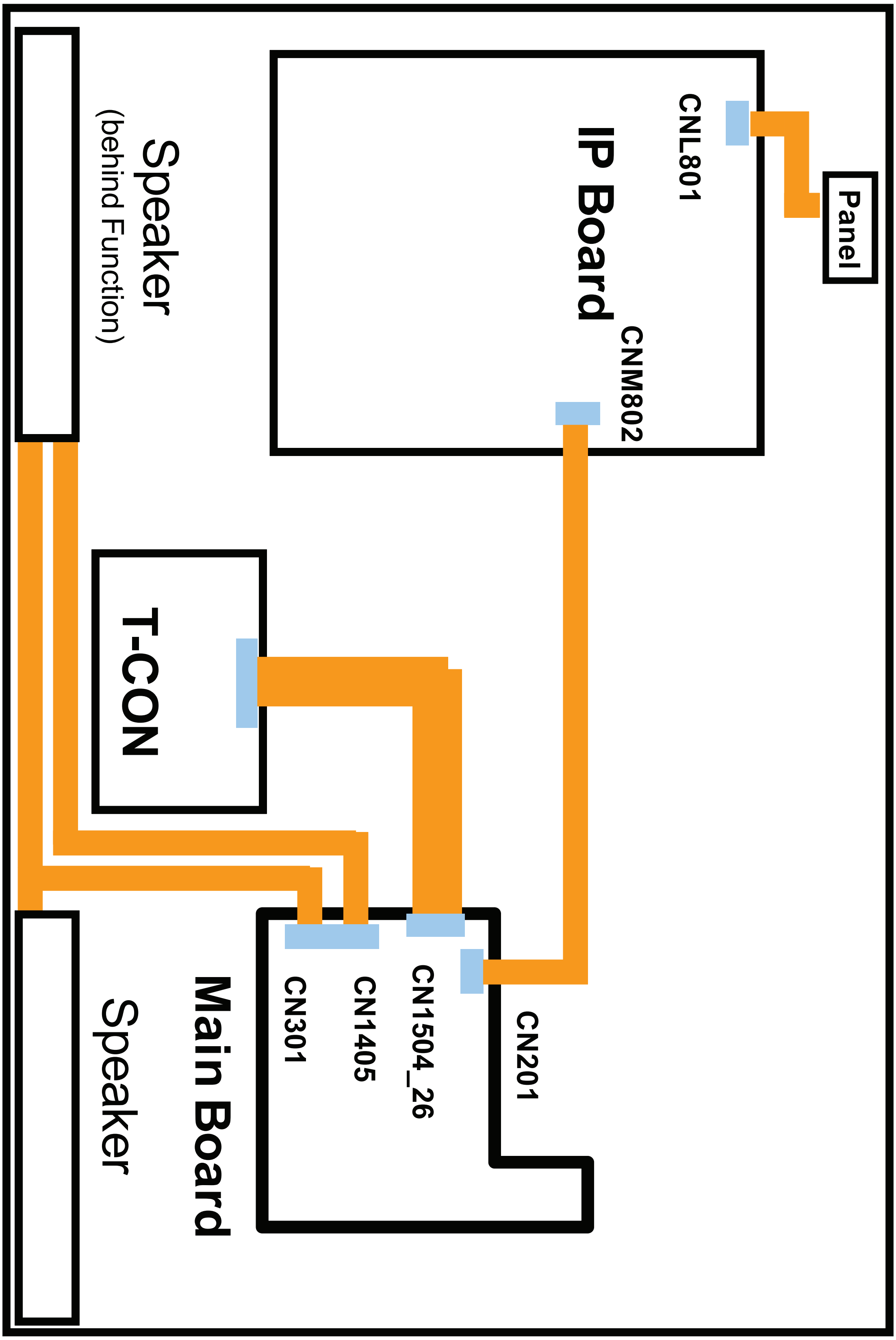
6. Wiring Diagram

6-1. Wiring Diagram

■ 22"



■ 26"/32"


Panel
CNL801
IP Board
CNM802
Speaker
(behind Function)
T-CON
CN201
CN1504_26
CN1405
CN301
Main Board
Speaker

6-2. Connector

To Panel CN1504_22/CN1503_26 SX1 CN1401_26/CN1402_22 X4			
1	Panel_VCC	16	ODD[CLK]+
2	Panel_VCC	17	ODD[CLK]-
3	Panel_VCC	18	GND
4	Panel_VCC	19	ODD[2]+
5	Panel_VCC	20	ODD[2]-
6	GND	21	GND
7	GND	22	ODD[1]+
8	GND	23	ODD[1]-
9	TCON_WP	24	GND
10	FORMAT	25	ODD[0]+
11	NC	26	ODD[0]-
12	GND	27	GND
13	ODD[3]+	28	SDA_TCON
14	ODD[3]-	29	SCL_TCON
15	GND	30	NC

CN201(to Powr board)			
1	B12VS	10	GND
2	A5V	11	GND
3	B12VS	12	H_OUT
4	A5V	13	B13V
5	B5V	14	PWM_ DIMMING
6	B5V	15	B13V
7	B5V	16	SW_ NVERTER
8	GND	17	B13V
9	GND	18	IP_DET

CN301(FUNCTION) SX1 CN401 (FUNCTION) X4			
1	IR	5	MSDA
2	GND	6	KEY_INPUT1
3	A5V	7	KEY_INPUT2
4	MSCL	8	LED_STB

CN1405 (SPEAKER) SX1 CN1302 (SPEAKER) X4			
1	R+	3	L+
2	R-	4	L-
3	CVBS	8	SL_IN

CN706 (USB) SX1 CN1004 (USB) X4			
1	USB_VCC	3	USB_DP
2	USB_DM	4	GND

CN1102(PC) SX1 CN1101(PC) X4			
1	PC_RED	9	PC_5V
2	PC_GREEN	10	IDENT_PC
3	PC_BLUE	11	R_FANET
4	T_FANET	12	SDA_DOWN
5	GND	13	PC_HS
6	GND	14	PC_VS
7	GND	15	SCL_DOWN
8	GND		

CN1101(PC/DIV SOUND) SX1 CN1102(PC/DIV SOUND) X4			
1	GND	4	NC
2	PC_SR_IN	5	NC
3	PC_SL_IN	6	NC
4	T_FANET	12	SDA_DOWN

CN1003 (HDMI1) SX1 CN1201 (HDMI1) X4			
1	HDMI1_RX2+	11	GND
2	GND	12	HDMI1_ RXCLK-
3	HDMI1_RX2-	13	HDMI_CEC
4	HDMI1_RX1+	14	GND
5	GND	15	SCL
6	HDMI1_RX1-	16	SDA
7	HDMI1_RX0+	17	GND
8	GND	18	5V
9	HDMI1_RX0-	19	HPD
10	HDMI1_ RXCLK+		

CN1206_26 (HDMI2) SX1 CN1202_26 (HDMI2) X4			
1	HDMI2_RX2+	11	GND
2	GND	12	HDMI2_ RXCLK-
3	HDMI2_RX2-	13	HDMI_CEC
4	HDMI2_RX1+	14	GND
5	GND	15	SCL
6	HDMI2_RX1-	16	SDA
7	HDMI2_RX0+	17	GND
8	GND	18	5V
9	HDMI2_RX0-	19	HPD
10	HDMI2_RXCLK+		

CN701(COMP1 JACK) SX1 CN1002(COMP1 JACK) X4			
1	GND		
2	COM2_SL		
3	COM2_SR		
4	GND		
5	COMP2_SR		
6	COMP2_SL		
7	GND		
8	COMP2_PR		
9	COMP2_PR		
10	GND		
11	COMP2_PB		
12	COMP2_PB		
13	GND		
14	IDENT_COMP2		
15	COMP2_Y		

CN1310(HEADPHONE) SX1 CN1301 (HEADPHONE) X4			
1	GND	4	GND
2	OUT_L	5	IDENT_HP
3	OUT_R	6	NC

6-3. Connector Functions

Connector	Functions
CN201 <-> IP CNM802	Supply main power and dimming signal from IP board to Main Board.
"CN1303_26/CN1304_19 <-> T-CON"	The LVDS signal transfered from Main Board to Panel .

6-4. Cables

Use	LEAD (Main-IP 18P)	LVDS (Main - TCON)
Code	22" C4000 : BN39-01267L 26" C4000 : BN39-01267A 32" C4000 : BN39-01267C	22" C4000 : BN96-12447N 26" C4000 : BN96-12469L 32" C4000 : BN96-12469M
Photo		